

RESPONSE TABLE

Issue/Consideration	Strategy	Key Messages
Pension Asset Accounting: Auditor General's qualified opinion	Confirm that the province will continue to follow PSAS, as always, and seek appropriate expert guidance where PSAS is silent. Highlight supporting perspectives from external consultants.	The government continues to move forward and present the province's finances fairly and accurately and in accordance with Canadian Public Sector Accounting Standards (PSAS). The government respectfully disagrees with the Auditor General's interpretation of the accounting standards, as PSAS neither requires unilateral control to record an asset, nor does it include a requirement to obtain a letter from the co-sponsor of the plan agreeing to reduce further contributions within 12 months. The government is open to continue to discuss the matter in hopes of resolving this matter.
IESO Accounting: 1) Market Asset Accounts 2) Rate-Regulated Accounting 3) AG to audit IESO's 2017 statements 4) OPG/IESO "inappropriate expenses" 5) Peripheral: OPG Executive Compensation	Confirm that the province will continue to follow PSAS, as always, and seek appropriate expert guidance where PSAS is silent. Re-iterate government's appreciation of the Auditor General's independent review and the IESO's recent unqualified audit record.	The government welcomes the Auditor General's independent review and remains committed to assisting her office in providing its views to the Legislative Assembly. The Independent Electricity System Operator's (IESO) change of accounting policy provides more transparency into the value of transactions that flow through Ontario's \$17 billion electricity market and reflect the economic substance of certain types of expenses that may not be directly recovered through normal revenue requirement models, and instead are recovered through rate regulation. The IESO's recent accounting changes are supported by IESO's audit committee, board of directors, its independent external auditor and by the Office of the Provincial Controller. The IESO prepares its financial statements in accordance with PSAS, and received an unqualified, or clean, audit opinion on its 2016 financial statements.

Issue/Consideration	Strategy	Key Messages
Fair Hydro Plan Accounting: “convenient/inappropriate accounting”	Highlight due diligence included in OFHP decision making. Refuse to speculate about AG's potential future audit opinion. Emphasize that the province will continue to follow PSAS, as always, and seek appropriate expert guidance where PSAS is silent.	As part of Ontario's Fair Hydro Plan (OFHP), bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them. Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers. Ontario Power Generation (OPG) was identified as the Financial Services Manager (FSM) responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations. OPG has the necessary expertise to assist with refinancing the GA and will ensure that it is done efficiently and cost-effectively. OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with PSAS and ensures that the fairness goals underlying the program are achieved in a cost-effective manner. In developing the policy, the government considered a range of implementation options. Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks and take necessary actions to meet the mandate. The government also consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due

Issue/Consideration	Strategy	Key Messages
		diligence was completed. The province will continue to prepare its consolidated financial statements in accordance with PSAS. PSAS is silent on a key accounting issue regarding the OFHP – the standards neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities. In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards. In this case, IESO consulted US GAAP, the accounting framework in North America that provides the most developed guidance on rate regulated operations.
Pre-Election Report: “government should publicly communicate if and when”	Re-iterate the government’s commitment to working with the Office of the Auditor General. Confirm that the government will, as always, continue to follow the relevant legislation.	Under the <i>Fiscal Transparency and Accountability Act, 2004</i>, the government may file a regulation that would require it to release a Pre-Election Report on Ontario’s Finances. Should the government file such a regulation, the Auditor General would be required to issue a statement based on a prompt review following the release of such a Pre-Election Report. The government remains committed to meeting the legislative requirements of the Act, and working constructively with the Auditor General.
Debt Reduction Plan: “Ontario has the highest sub-sovereign debt in the world”	Re-iterate government’s track record of responsible fiscal management and provide high-level overview of debt reduction plan.	The government’s long-term infrastructure plan to invest about \$190 billion over 13 years, starting in 2014-15, will contribute to the growth of the economy. The Centre for Spatial Economics found that for every \$1 spent on public infrastructure, GDP increases by up to \$6, on average, in the long term.
“Legislated Accounting”	Emphasize that the province will continue to follow PSAS, as always, and seek appropriate expert guidance where PSAS is silent.	The <i>Ontario Fair Hydro Plan Act, 2017</i> and its related regulations do not create accounting rules or legislate the accounting. It is important to distinguish legislating the accounting from legislating the right of the government to recover amounts from specified ratepayers in the future,

Issue/Consideration	Strategy	Key Messages
	Provide example of the only time legislated accounting was used; explain how OFHP does not legislate accounting.	which in the absence of legislation, would have been collected from specified ratepayers as the costs were incurred. The province, as always, will prepare its consolidated financial statements in accordance with PSAS, including the transactions resulting from Ontario's Fair Hydro Plan.
Use of External Advisors: Perception that the government looks to external advisors to circumvent the Auditor General	Confirm that the province seeks external expertise when appropriate as a normal course of business.	The government's use of external expertise for accounting and financial reporting matters supplements its own resources on complex or emerging accounting and reporting matters. External advisors are generally engaged to provide advice and guidance to supplement internal analysis, and in the normal course of business.

Outstanding Business Issues – Ontario Fair Hydro Plan

Issue	Overview	Supporting Documentation	Next Steps
~~Increased Credit Facilities~~	~~To help IESO manage monthly cash flow requirements associated with its role in OFHP~~	~~Credit Facility Agreement~~ ~~OIC~~	~~OFA drafting Credit Facility Agreement and OIC~~ Timing: Cabinet on June 27th
~~Indemnities for IESO and OPG~~	~~MOF to provide indemnities to companies, employees, and directors~~	~~S.28 Business Case~~ ~~Draft Indemnity~~	~~ENE / OPG / IESO has provided responses to OFA Qs~~ Timing: Indemnities issued at start of July
Guarantees	Province to provide contingent supports to enable structure	- Draft Term Sheet - Performance Guarantee - Service Guarantee	OFA / Energy to provide comments on draft term sheet to OPG Timing: Language finalized by end of July
Equity Injection	Province to purchase shares of OPG on a monthly basis	- Draft Term Sheet - Master Subscription Agreement - Service Level Agreement - Notice of Subscription - Amendment to Articles	- OFA / Energy to provide comments on equity injection term sheet - OPG / OFA / Energy to develop other agreements and revise OPG Articles Timing: Documents finalized at end of July
PILs Exemption	Province to mitigate cost to ratepayers by minimizing PILs payable by OPG financing vehicle	Tax Regulation	- OPG to consider value of comfort letter - MOF legal to draft regulation (consider broad vs. narrow) Timing: Regulation by fall
Subordinated Debt Loan Agreement	OPG will lend the equity injection from the Province to the Trust by way of subordinated debt	- Draft Term Sheet - Debt Loan Arrangement	- OFA to provide comments - OPG to draft Debt Loan Arrangement Timing: TBD

Outstanding Business Issues – Ontario Fair Hydro Plan

Issue	Overview	Supporting Documentation	Next Steps
Guarantees	Province to provide contingent supports to enable structure	- Draft Term Sheet - Performance Guarantee - Service Guarantee	OPG/MOF/ENE to discuss respective comments on the term sheet Timing: Language finalized by end of July
Equity Injection	Province to purchase shares of OPG on a monthly basis	- Draft Term Sheet - Master Subscription Agreement - Service Level Agreement - Notice of Subscription - Amendment to Articles	- OFA / Energy to provide comments on Master Subscription Agreement - OPG / OFA / Energy to develop other agreements and revise OPG Articles Timing: Documents finalized at end of July
PILs Exemption	Province to mitigate cost to ratepayers by minimizing PILs payable by OPG financing vehicle	Tax Regulation	- OPG to consider value of comfort letter - MOF legal to draft regulation (consider broad vs. narrow) Timing: Regulation by fall
Subordinated Debt Loan Agreement	OPG will lend the equity injection from the Province to the Trust by way of subordinated debt	- Draft Term Sheet - Debt Loan Arrangement	- OFA to provide comments - OPG to draft Debt Loan Arrangement Timing: TBD

Outstanding Business Issues – Ontario Fair Hydro Plan

Issue	Overview	Supporting Documentation	Next Steps
Guarantees	Province to provide contingent supports to enable structure	- Draft Term Sheet - Performance Guarantee - Service Guarantee	OPG/MOF/ENE to discuss respective comments on the term sheet Timing: TBD
Equity Injection	Province to purchase shares of OPG on a monthly basis	- Master Subscription Agreement - Service Level Agreement - Notice of Subscription - Amendment to Articles	- OFA / Energy to review MSA and SLA - OPG / Energy to revise OPG Articles to enable new class of shares Timing: TBD
PILs Exemption	Province to mitigate cost to ratepayers by minimizing PILs payable by OPG financing vehicle	Tax Regulation	MOF legal to draft comfort letter and begin drafting regulation Timing: Regulation by fall
Subordinated Debt Loan Agreement	OPG will lend the equity injection from the Province to the Trust by way of subordinated debt	- Draft Term Sheet - Debt Loan Arrangement	- OFA to provide comments - OPG to draft Debt Loan Arrangement Timing: TBD

Implementation of Ontario's Fair Hydro Plan

Week of December 4, 2017

Global Adjustment (GA) Refinancing – Business Issues / Implementation

Issue	Overview	Supporting Documentation	Timing / Next Steps
Provincial Support Agreements	Province to provide contingent supports to enable structure	- Term Sheet - Change of Law Protection Agreement - Change of Law Process Agreement	- MOF / OPG / ENERGY to finalize Protection Agreement and Process Agreement based on Term Sheet approved by TB/CAB Timing / Next Steps: - Agreements to be finalized by mid-December (Note: No later than December 15)
OPG's Financing Plan / Market Activity	OPG, as Financial Services Manager (FSM), to provide a Financing Plan in accordance with legislation, to evaluate the incurrence of funding obligations consistent with the FAA	- Minister's FAA letter to OPG - Financing Plan - Transaction Documents	- OPG has provided another draft of the Financing Plan to ENERGY for review Timing / Next Steps: - Final Financing Plan expected the week of December 11, pending conclusion of rating agency assessment and Ministry of Energy review - Finalization of Transaction Documents in December / January as required (TBD): - December – OPG initial purchase of IESO regulatory asset utilizing warehouse facility - January – OPG to proceed with initial issuance of term debt
Equity Injection	Province to purchase shares of OPG on a monthly basis	- Master Subscription Agreement – Complete - MOU between OFA and Energy – Complete ~~Notice of Subscription~~ <u>First Share</u>	- Master Share Subscription Agreement and Shareholder resolution signed on November 29 ~~OFA/ENE MOU will be signed by December 7~~ <u>First equity injection closed on December 20.</u>

Issue	Overview	Supporting Documentation	Timing / Next Steps
		<u>Subscription Form-Complete</u> Amendment to Articles Signed – Complete	Timing / Next Steps: ~~First equity injection expected to be completed by December 18~~ <u>Next asset transfer/equity injection expected to take place in March/18.</u>
Protocol for Subordinated and Junior Subordinated Debt	OPG will lend the equity injection from the Province to the Trust by way of subordinated debt	<u>Subordinated Debt Pricing Protocol-Complete</u> <u>Draft Term Sheet</u> <u>Debt Loan Arrangement</u>	~~OFA has provided comments~~ ~~OPG to draft Debt Loan Arrangement~~ Timing / Next Steps: ~~OPG to provide additional details~~ <u>Subordinated Debt Pricing Protocol agreement signed by OPG, OFA and ENERGY on December 19, 2017.</u>
PILs Exemption	- The beneficiary of the OFHP Trust would be subject to tax under the payments in lieu of taxes (PILs) regime under the <i>Electricity Act, 1998</i> (EA), and would pay PILs to the Ontario Electricity Financial Corporation (OEFC) - Province to mitigate cost to ratepayers by minimizing PILs payable by the Trust beneficiary - A regulation under the EA is required to exempt the beneficiary from PILs	Regulation	- MOF is drafting the regulation Timing / Next Steps: - Regulation expected to proceed to LRC (TBD)
OPG / IESO Commercial Agreement	OPG and IESO to enter in to commercial agreements governing the Financing Entity purchase of the regulatory assets (i.e., the Master Transfer and Servicing Agreement, Security		- OPG and IESO working to finalize Agreement - IESO Board has approved delegation of approval for agreements - IESO provided an update to its Board on November 29

Issue	Overview	Supporting Documentation	Timing / Next Steps
	Agreement and Acknowledgement and Indemnity Agreement)		Timing / Next Steps: • Agreements to be finalized. • Further changes may be required pending the completion of the rating process

Ontario's Fair Hydro Plan – Implementation Matrix of Other Items

Item	Key Deliverables / Considerations		Timing / Next Steps
1) Broadening Rural or Remote Rate Protection (RRRP) (SNAP)			
ENERGY, LSB and LDCs	<u>Recent Action Items</u> - All LDCs have indicated they have implemented the program - IESO has begun to submit reimbursement claims to the Ministry	- Discussions have begun with OEB over content of cost forecast report, as contemplated in Regulation	
2) Expanding Ontario Electricity Support Program (OESP) (SNAP)			
ENERGY, LSB, MCSS and OEB	<u>Recent Action Items</u> - MCSS has begun work to enroll social assistance (SA) clients to OESP, and is directly contacting these clients by phone and letters. The temporary call center is operational and OESP posters and brochures are being distributed to SA offices. - OEB and MCSS and working together on aligning software systems to electronically automate enrollment of SA clients into OESP. Targeting summer 2018 for completion. - The OEB and CRA have reached an agreement to implement an e-signature solution for OESP applications. Work is underway to implement the solution and is expected for Q1 2018. Once completed, the MOU between CRA and MOF will be updated to reflect change. - Ministry is targeting a January 22 – LRC date to proclaim OEBA amendments to shift the OESP to the tax base and to transfer program administration authorities to the Ministry. OESP	- LRC package being developed for proclaiming OEBA provisions and amending OESP regulation for Q1 2018 - Continue to work with OEB to build up the Ministry's knowledge base on administering the OESP	

Item	Key Deliverables / Considerations	Timing / Next Steps
	variance account is expected to deplete in February 2018, and mechanisms to compensate program delivery partners through the tax base needs to be in place for that date. The Ministry is working with the OEB on knowledge transfer in order to take over program administration in Q1 / Q2 2018. Awaiting feedback from TBS on FTE allocations – the Ministry requested 5 FTEs to support OESP administration through PRRT	
3) Providing a First Nations On-Reserve Delivery Credit (SNAP)		
ENERGY and LSB	<u>Recent Action Items</u> - All LDCs have indicated they have implemented the program. - FNDC post card has been distributed to First Nations Band Councils - IESO has begun submitting claims for reimbursement to the Ministry	Receiving regular updates from H1 on enrollment
4) Establishing an Affordability Fund (CRED)		
ENERGY, IGS, LSB, Blakes, CSD, OPCD, TBS, MOF and H1 (KPMG and Osler)	<u>Recent Action Items</u> - October 12 – Soft launch of microsite and 1-800 number - October 24 – Formal announcement in Hamilton involving the Minister of Energy - As of November 16 – 1,634 intake forms submitted; over 1,000 AFT applications sent to Hydro One or the 41 active/pending participating distributors - On Oct. 24 – the Trustees held a webinar with 200 participants to overview program design, walk-through the web site, and answer distributor questions - Next Trustee meetings scheduled for December 14, 2017 - The Trust expects to enter into agreements with interested electricity distributors starting mid to late December 2017 (Hydro One will deliver the program in service areas of those distributors who do not apply)	Fall 2017: - The Trustees are considering the use of Ontario 211 services for the Affordability Fund - The Fund will have an iterative design process to support continuous improvement, and will revisit design elements every 6 months and measures every 3 months - ENERGY has amended the TPA with the Affordability Fund Trust to require use of the Ontario logo in Fund marketing and communications and is waiting for the Trustees to sign - Report back to TB/MBC through the PRRT process with

Item	Key Deliverables / Considerations	Timing / Next Steps
		final program details and a performance management framework including outcome measures and targets Early 2018: ENERGY can apply for additional funds through an in-year TB submission based on performance and need. Trust term can be extended with amended/new TPA if agreed by Trust
5) Bill Presentment (SNAP/LSB)		
ENERGY	<u>Recent Action Items</u> Ongoing Ministry work re bill presentment	2017-2018 – Bill redesign
6) Expanding ICI (ESP/COMs)		
ENERGY, LSB, IESO and LDCs	<u>Recent Action Items</u> - Ongoing OCC outreach campaign to promote ICI. Ministry finalizing OCC's expansion proposal - Ministry finalizing CME proposal	Quarterly Report Backs re ICI to TBS / MBC
7) Energy Sector Efficiencies (i.e., Ontario Energy Board and IESO) (SNAP / ESP)		
ENERGY, LSB, OEB and IESO	<u>Recent Actions Items</u> Work with agencies ongoing	Continue this work as part of 2017 LTEP implementation

Implementation of Ontario's Fair Hydro Plan

Week of ~~November 20~~December 4, 2017

Global Adjustment (GA) Refinancing – Business Issues / Implementation

Issue	Overview	Supporting Documentation	Timing / Next Steps
Provincial Support Agreements	Province to provide contingent supports to enable structure	- Term Sheet - Change of Law Protection Agreement - Change of Law Process Agreement	- MOF / OPG / ENE to finalize Protection Agreement and Process Agreement based on Term Sheet approved by TB/CAB Timing / Next Steps: - Briefing of the ENERGY, MOF and TBS Ministers - Agreements to be finalized in late November or early December
OPG's Financing Plan / Market Activity	OPG, as Financial Services Manager (FSM), to provide a Financing Plan in accordance with legislation, to evaluate the incurrence of funding obligations consistent with the FAA	Minister's FAA letter to OPG	- OPG has provided a draft of the Financing Plan to ENERGY Timing / Next Steps: ~~OPG Board committee review and approval by the OPG Board (TBD)~~ - OPG initial debt issuance is currently planned to proceed in ~~December~~<u>er January</u> (TBD). <u>Will use warehousing facility for initial asset transfer in December.</u>
Equity Injection	Province to purchase shares of OPG on a monthly basis	- Master Subscription Agreement- <u>complete</u> ~~MOU~~ between OFA and Energy (<u>complete</u>) - Notice of Subscription - Amendment to Articles <u>Signed- complete</u>	<u>Master Share Subscription Agreement and Shareholder resolution signed on Nov 29, 2017.</u> <u>OFA/ENE MOU will be signed by Dec 7.</u> ~~OPG to request Minister's signature on the Shareholder resolution.~~ ~~OPG/ENE to sign Master Share Subscription Agreement~~ ~~OFA / ENE to finalize monthly process and sign-off mechanism~~

Commented [TS(1)]: Checking with OPG to see if their Board approved it.

Issue	Overview	Supporting Documentation	Timing / Next Steps
			Timing / Next Steps: First equity injection expected to be completed by December 18. Agreements to be signed by end of November
Subordinated Debt Loan Agreement Protocol for Subordinated and Junior Subordinated Debt	OPG will lend the equity injection from the Province to the Trust by way of subordinated debt	- Draft Term Sheet - Debt Loan Arrangement	- OFA ~~tehas~~ provided comments. - OPG to draft Debt Loan Arrangement Timing / Next Steps: - Fall (TBD) - OPG to provide additional details
PILs Exemption	- The beneficiary of the OFHP Trust would be subject to tax under the payments in lieu of taxes (PILs) regime under the <i>Electricity Act, 1998</i> (EA), and would pay PILs to the Ontario Electricity Financial Corporation (OEFC) - Province to mitigate cost to ratepayers by minimizing PILs payable by the Trust beneficiary - A regulation under the EA is required to exempt the beneficiary from PILs - OPG has advised that a comfort letter signed by the Minister is required	- Comfort Letter - Tax Regulation	- MOF is working to complete comfort letter to OPG and to finalize the regulation Timing / Nexts Steps: - Regulation expected to proceed to LRC in December 2017 (TBD)
OPG / IESO Commercial Agreement	OPG and IESO to enter in to commercial agreements governing the Financing Entity purchase of the regulatory assets (i.e., the Master Transfer and Servicing Agreement, Security		- OPG and IESO working to finalize Agreement Timing / Next Steps: - The draft commercial agreements to be reviewed by IESO Board on November 22

Commented [TS(2): May need to be updated following feedback from OPG

Issue	Overview	Supporting Documentation	Timing / Next Steps
	Agreement and Acknowledgement and Indemnity Agreement)		Further changes may be required pending the completion of the rating process

Ontario's Fair Hydro Plan – Implementation Matrix of Other Items

Item	Key Deliverables / Considerations	Timing / Next Steps
1) Broadening Rural or Remote Rate Protection (RRRP) (SNAP)		
ENERGY, LSB and LDCs	<u>Recent Action Items</u> - All LDCs have indicated they have implemented the program - IESO has begun to submit reimbursement claims to the Ministry	Discussions have begun with OEB over content of cost forecast report, as contemplated in Regulation
2) Expanding Ontario Electricity Support Program (OESP) (SNAP)		
ENERGY, LSB, MCSS and OEB	<u>Recent Action Items</u> - MCSS has begun work to enroll social assistance (SA) clients to OESP, and is directly contacting these clients by phone and letters. The temporary call center is operational and OESP posters and brochures are being distributed to SA offices. - OEB and MCSS are working together on aligning software systems to electronically automate enrollment of SA clients into OESP. Targeting summer 2018 for completion. - The OEB and CRA have reached an agreement to implement an e-signature solution for OESP applications. Work is underway to implement the solution and is expected for Q1 2018. Once completed, the MOU between CRA and MOF will be updated to reflect change. - Ministry is targeting a January 23 LRC date to proclaim OEBA amendments to shift the OESP to the tax base and to transfer	- LRC package being developed for proclaiming OEBA provisions and amending OESP regulation for Q1 2018 - Continue to work with OEB to build up the Ministry's knowledge base on administering the OESP. LRC package being developed for proclaiming OEBA provisions and amending OESP regulation; scheduled for December 11 - Continue to work with OEB to build up the Ministry's

Formatted: Bulleted + Level: 1 + Aligned at: 0 cm + Indent at: 0.63 cm

Item	Key Deliverables / Considerations	Timing / Next Steps
	<u>program administration authorities to the Ministry. OESP variance account is expected to deplete in February 2018, and mechanisms to compensate program delivery partners through the tax base needs to be in place for that date.</u> <u>The Ministry is working with the OEB on knowledge transfer in order to take over program administration in Q1 / Q2 2018. Awaiting feedback from TBS on FTE allocations – the Ministry requested 5 FTEs to support OESP administration through PRRT.</u> <u>Recent Action Items</u> • <u>July 26 TB/MB approval for MCSS to expand FTEs and create team dedicated to OESP enrolment, using funds approved on March 1, 2017 under FHP. Sought 50 FTEs, but only received 20—MCSS is considering report back in the fall to ask for more FTEs</u> • <u>OEB and MCSS completed data exchange to identify SA clients currently not enrolled in OESP. Outreach calls began late August, with direct mail-outs in late September. New call centre to be ready to receive calls in October, and MCSS to continue developing software solution for automation over next several months</u> • <u>CRA approval of proposal for e-signatures on OESP applications. OEB is working with service provider to upgrade online application process (November), and CRA will formally accept e-signature process by amending MOU with Ministry of Finance</u> • <u>Ministry is targeting November/December to proclaim OEBA amendments to shift OESP to tax base, along with supporting regulatory amendments</u> • <u>Ministry and OEB have initiated work to transfer OESP to government</u>	<u>knowledge base on administering the OESP</u>
3) Providing a First Nations On-Reserve Delivery Credit (SNAP)		
• ENERGY and LSB	<u>Recent Action Items</u> • All LDCs have indicated they have implemented the program. • FNDC post card has been distributed to First Nations Band Councils	• Receiving regular updates from H1 on enrollment

Item	Key Deliverables / Considerations	Timing / Next Steps
	IESO has begun submitting claims for reimbursement to the Ministry	
4) Establishing an Affordability Fund (CRED)		
ENERGY, IGS, LSB, Blakes, CSD, OPCD, TBS, MOF and H1 (KPMG and Osler)	<u>Recent Action Items</u> - October 12 – Soft launch of microsite and 1-800 number - October 24 – Formal announcement in Hamilton involving the Minister of Energy - As of Oct. 23 – 66 applications from 6 LDCs processed through the AFT program - On Oct. 24 – the Trustees held a webinar with 200 participants to overview program design, walk-through the web site, and answer distributor questions - Next Trustees meetings are scheduled for November 30 and December 14, 2017 - The Trust expects to enter into agreements with interested electricity distributors starting mid to late December 2017 (Hydro One will deliver the program in service areas of those distributors who do not apply)	Fall 2017: - The Trustees are considering the use of Ontario 211 services for the Affordability Fund - The Fund will have an iterative design process to support continuous improvement, and will revisit design elements every 6 months and measures every 3 months - ENERGY has amended the TPA with the Affordability Fund Trust to require use of the Ontario logo in Fund marketing and communications and is waiting for the Trustees to sign - Report back to TB/MBC through the PRRT process with final program details and a performance management framework including outcome measures and targets Early 2018: - ENERGY can apply for additional funds through an in-year TB submission based on performance and need. Trust term can be extended with amended/new TPA if agreed by Trust
5) Bill Presentment (SNAP/LSB)		

Item	Key Deliverables / Considerations	Timing / Next Steps
ENERGY	<u>Recent Action Items</u> Ongoing Ministry work re bill presentment	2017-2018 – Bill redesign
6) Expanding ICI (ESP/COMs)		
ENERGY, LSB, IESO and LDCs	<u>Recent Action Items</u> - Ongoing OCC outreach campaign to promote ICI - Ministry review OCC proposal to expand ICI outreach program - Ongoing outreach with LDCs being undertaken by IESO - CME proposal (TBD)	Quarterly Report Backs re ICI to TBS / MBC
7) Energy Sector Efficiencies (i.e., Ontario Energy Board and IESO) (SNAP / ESP)		
ENERGY, LSB, OEB and IESO	OEB: - Directive / Letter (TBD) <u>Considerations</u> - Signal efficiencies intent in OEB business plan letter - Work with OEB/LDCs on LTEP document and proposed directive to OEB - Mandate Review implementation is an opportunity to reiterate expectations IESO: - Directive / Letter (TBD) <u>Considerations</u> - IESO's stakeholder engagement re Market Renewal is ongoing	Continue this work as part of 2017 LTEP implementation

Implementation of Ontario's Fair Hydro Plan

Week of ~~November 20~~December 4, 2017

Global Adjustment (GA) Refinancing – Business Issues / Implementation

Issue	Overview	Supporting Documentation	Timing / Next Steps
Provincial Support Agreements	Province to provide contingent supports to enable structure	- Term Sheet - Change of Law Protection Agreement - Change of Law Process Agreement	- MOF / OPG / ENE to finalize Protection Agreement and Process Agreement based on Term Sheet approved by TB/CAB Timing / Next Steps: - Briefing of the ENERGY, MOF and TBS Ministers - Agreements to be finalized in late November or early December
OPG's Financing Plan / Market Activity	OPG, as Financial Services Manager (FSM), to provide a Financing Plan in accordance with legislation, to evaluate the incurrence of funding obligations consistent with the FAA	Minister's FAA letter to OPG	- OPG has provided a draft of the Financing Plan to ENERGY Timing / Next Steps: ~~OPG Board committee review and approval by the OPG Board (TBD)~~ - OPG initial debt issuance is currently planned to proceed in ~~December~~<u>or January</u> (TBD). <u>Will use warehousing facility for initial asset transfer in December.</u>
Equity Injection	Province to purchase shares of OPG on a monthly basis	- Master Subscription Agreement- <u>complete</u> - MOU between OFA and Energy <u>(complete)</u> - Notice of Subscription - Amendment to Articles <u>Signed- complete</u>	<u>Master Share Subscription Agreement and Shareholder resolution signed on Nov 29, 2017.</u> <u>OFA/ENE MOU will be signed on by Dec 6.</u> ~~OPG to request Minister's signature on the Shareholder resolution.~~ ~~OPG/ENE to sign Master Share Subscription Agreement~~ ~~OFA / ENE to finalize monthly process and sign off mechanism~~

Commented [TS(1)]: Checking with OPG to see if their Board approved it.

Issue	Overview	Supporting Documentation	Timing / Next Steps
			Timing / Next Steps: First equity injection expected to be completed by December 18. Agreements to be signed by end of November
Subordinated Debt Loan Agreement Protocol for Subordinated and Junior Subordinated Debt	OPG will lend the equity injection from the Province to the Trust by way of subordinated debt	- Draft Term Sheet - Debt Loan Arrangement	- OFA ~~tehas~~ provided comments. - OPG to draft Debt Loan Arrangement Timing / Next Steps: - Fall (TBD) - OPG to provide additional details
PILs Exemption	- The beneficiary of the OFHP Trust would be subject to tax under the payments in lieu of taxes (PILs) regime under the <i>Electricity Act, 1998</i> (EA), and would pay PILs to the Ontario Electricity Financial Corporation (OEFC) - Province to mitigate cost to ratepayers by minimizing PILs payable by the Trust beneficiary - A regulation under the EA is required to exempt the beneficiary from PILs - OPG has advised that a comfort letter signed by the Minister is required	- Comfort Letter - Tax Regulation	- MOF is working to complete comfort letter to OPG and to finalize the regulation Timing / Nexts Steps: - Regulation expected to proceed to LRC in December 2017 (TBD)
OPG / IESO Commercial Agreement	OPG and IESO to enter in to commercial agreements governing the Financing Entity purchase of the regulatory assets (i.e., the Master Transfer and Servicing Agreement, Security		- OPG and IESO working to finalize Agreement Timing / Next Steps: - The draft commercial agreements to be reviewed by IESO Board on November 22 - Further changes may be required pending the

Commented [TS(2)]: May need to be updated following feedback from OPG

Issue	Overview	Supporting Documentation	Timing / Next Steps
	Agreement and Acknowledgement and Indemnity Agreement)		completion of the rating process

Ontario's Fair Hydro Plan – Implementation Matrix of Other Items

Item	Key Deliverables / Considerations		Timing / Next Steps
1) Broadening Rural or Remote Rate Protection (RRRP) (SNAP)			
ENERGY, LSB and LDCs	<u>Recent Action Items</u> - All LDCs have indicated they have implemented the program - IESO has begun to submit reimbursement claims to the Ministry	Discussions have begun with OEB over content of cost forecast report, as contemplated in Regulation	
2) Expanding Ontario Electricity Support Program (OESP) (SNAP)			
ENERGY, LSB, MCSS and OEB	<u>Recent Action Items</u> - July 26 TB/MB approval for MCSS to expand FTEs and create team dedicated to OESP enrolment, using funds approved on March 1, 2017 under FHP. Sought 50 FTEs, but only received 20 – MCSS is considering report-back in the fall to ask for more FTEs - OEB and MCSS completed data exchange to identify SA clients currently not enrolled in OESP. Outreach calls began late August, with direct mail-outs in late September. New call centre to be ready to receive calls in October, and MCSS to continue developing software solution for automation over next several months - CRA approval of proposal for e-signatures on OESP applications. OEB is working with service provider to upgrade online application process (November), and CRA will formally accept e-	- LRC package being developed for proclaiming OEBA provisions and amending OESP regulation; scheduled for December 11 - Continue to work with OEB to build up the Ministry's knowledge base on administering the OESP	

Item	Key Deliverables / Considerations	Timing / Next Steps
	signature process by amending MOU with Ministry of Finance - Ministry is targeting November/December to proclaim OEBA amendments to shift OESP to tax base, along with supporting regulatory amendments - Ministry and OEB have initiated work to transfer OESP to government	
3) Providing a First Nations On-Reserve Delivery Credit (SNAP)		
ENERGY and LSB	<u>Recent Action Items</u> - All LDCs have indicated they have implemented the program. - FNDC post card has been distributed to First Nations Band Councils - IESO has begun submitting claims for reimbursement to the Ministry	Receiving regular updates from H1 on enrollment
4) Establishing an Affordability Fund (CRED)		
ENERGY, IGS, LSB, Blakes, CSD, OPCD, TBS, MOF and H1 (KPMG and Osler)	<u>Recent Action Items</u> - October 12 – Soft launch of microsite and 1-800 number - October 24 – Formal announcement in Hamilton involving the Minister of Energy - As of Oct. 23 – 66 applications from 6 LDCs processed through the AFT program - On Oct. 24 – the Trustees held a webinar with 200 participants to overview program design, walk-through the web site, and answer distributor questions - Next Trustees meetings are scheduled for November 30 and December 14, 2017 - The Trust expects to enter into agreements with interested electricity distributors starting mid to late December 2017 (Hydro One will deliver the program in service areas of those distributors who do not apply)	Fall 2017: - The Trustees are considering the use of Ontario 211 services for the Affordability Fund - The Fund will have an iterative design process to support continuous improvement, and will revisit design elements every 6 months and measures every 3 months - ENERGY has amended the TPA with the Affordability Fund Trust to require use of the Ontario logo in Fund marketing and communications and is waiting for the Trustees to sign - Report back to TB/MBC through the PRRT process with

Item	Key Deliverables / Considerations	Timing / Next Steps
		final program details and a performance management framework including outcome measures and targets Early 2018: ENERGY can apply for additional funds through an in-year TB submission based on performance and need. Trust term can be extended with amended/new TPA if agreed by Trust
5) Bill Presentment (SNAP/LSB)		
ENERGY	<u>Recent Action Items</u> Ongoing Ministry work re bill presentment	2017-2018 – Bill redesign
6) Expanding ICI (ESP/COMs)		
ENERGY, LSB, IESO and LDCs	<u>Recent Action Items</u> - Ongoing OCC outreach campaign to promote ICI - Ministry review OCC proposal to expand ICI outreach program - Ongoing outreach with LDCs being undertaken by IESO - CME proposal (TBD)	Quarterly Report Backs re ICI to TBS / MBC
7) Energy Sector Efficiencies (i.e., Ontario Energy Board and IESO) (SNAP / ESP)		
ENERGY, LSB, OEB and IESO	OEB: - Directive / Letter (TBD) <u>Considerations</u> - Signal efficiencies intent in OEB business plan letter - Work with OEB/LDCs on LTEP document and proposed directive to OEB - Mandate Review implementation is an opportunity to reiterate expectations	Continue this work as part of 2017 LTEP implementation

Item	Key Deliverables / Considerations	Timing / Next Steps
	IESO: • Directive / Letter (TBD) <u>Considerations</u> • IESO's stakeholder engagement re Market Renewal is ongoing	

Implementation of Ontario's Fair Hydro Plan

Week of November 20, 2017

Global Adjustment (GA) Refinancing – Business Issues / Implementation

Issue	Overview	Supporting Documentation	Timing / Next Steps
Provincial Protection and Assurance Agreement	Province to provide contingent supports to enable structure	- Draft Term Sheet - Performance Guarantee - Service Guarantee	MOF / ENE to finalize Protection Agreement based on Term Sheet approved by TB/CAB. Timing: In advance of OPG Board Meeting on November 13, 2017
OPG's Financing Plan			Timing: Late November or early December – OPG Initial debt issuance
Equity Injection	Province to purchase shares of OPG on a monthly basis	- Master Subscription Agreement - Service Level Agreement - Notice of Subscription - Amendment to Articles	OFA / ENE to determine required monthly process and sign-off mechanism Timing: October for internal provincial mechanism
Subordinated Debt Loan Agreement	OPG will lend the equity injection from the Province to the Trust by way of subordinated debt	- Draft Term Sheet - Debt Loan Arrangement	- OFA to provide comments - OPG to draft Debt Loan Arrangement Timing: Fall
PILs Exemption	Province to mitigate cost to ratepayers by minimizing PILs payable by OPG financing vehicle	- Comfort Letter - Tax Regulation	MOF legal to draft comfort letter and regulation (currently with MOF for review) Timing: Fall for regulation
OPG / IESO Commercial Agreement			OPG and IESO working to finalize Agreement Timing:

Commented [HS(1)]: ESP to update

Commented [HS(2)]: ESP to update

Commented [HS(3)]: SNAP to Update

Commented [HS(4)]: SNAP to update

Commented [HS(5)]: ESP to update

Commented [HS(6)]: ESP to update. Should likely call IESO.

Issue	Overview	Supporting Documentation	Timing / Next Steps

Ontario's Fair Hydro Plan – Implementation Matrix of Other Items

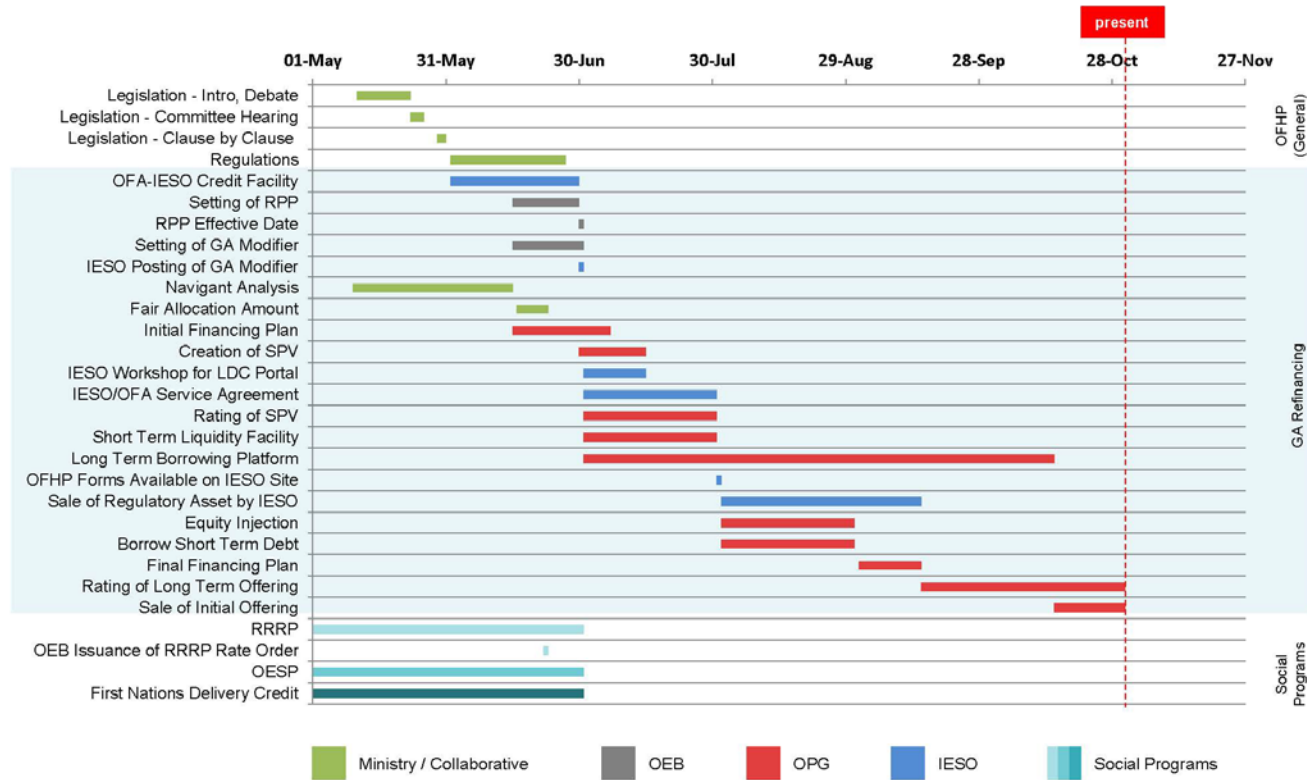
Item	Key Deliverables / Considerations	Timing / Next Steps
1) Broadening Rural or Remote Rate Protection (RRRP) (SNAP)		
ENERGY, LSB and LDCs	<u>Recent Action Items</u> - All LDCs have indicated they have implemented the program - IESO has begun to submit reimbursement claims to the Ministry	Discussions have begun with OEB over content of cost forecast report, as contemplated in Regulation
2) Expanding Ontario Electricity Support Program (OESP) (SNAP)		
ENERGY, LSB, MCSS and OEB	<u>Recent Action Items</u> - July 26 TB/MB approval for MCSS to expand FTEs and create team dedicated to OESP enrolment, using funds approved on March 1, 2017 under FHP. Sought 50 FTEs, but only received 20 – MCSS is considering report-back in the fall to ask for more FTEs - OEB and MCSS completed data exchange to identify SA clients currently not enrolled in OESP. Outreach calls began late August, with direct mail-outs in late September. New call centre to be ready to receive calls in October, and MCSS to continue developing software solution for automation over next several months - CRA approval of proposal for e-signatures on OESP applications. OEB is working with service provider to upgrade online application process (November), and CRA will formally accept e-signature process by amending MOU with Ministry of Finance	- LRC package being developed for proclaiming OEBA provisions and amending OESP regulation; scheduled for December 11 - Continue to work with OEB to build up the Ministry's knowledge base on administering the OESP

Item	Key Deliverables / Considerations	Timing / Next Steps
	- Ministry is targeting November/December to proclaim OEBA amendments to shift OESP to tax base, along with supporting regulatory amendments - Ministry and OEB have initiated work to transfer OESP to government	
3) Providing a First Nations On-Reserve Delivery Credit (SNAP)		
ENERGY and LSB	<u>Recent Action Items</u> - All LDCs have indicated they have implemented the program. - FNDC post card has been distributed to First Nations Band Councils - IESO has begun submitting claims for reimbursement to the Ministry	Receiving regular updates from H1 on enrollment
4) Establishing an Affordability Fund (CRED)		
ENERGY, IGS, LSB, Blakes, CSD, OPCD, TBS, MOF and H1 (KPMG and Osler)	<u>Recent Action Items</u> - October 12 – Soft launch of microsite and 1-800 number - October 24 – Formal announcement in Hamilton involving the Minister of Energy - As of Oct. 23 – 66 applications from 6 LDCs processed through the AFT program - On Oct. 24 – the Trustees held a webinar with 200 participants to overview program design, walk-through the web site, and answer distributor questions - Next Trustees meeting is scheduled for November 2, 2017	Fall 2017: - The Trustees are considering the use of Ontario 211 services for the Affordability Fund - The Fund will have an iterative design process to support continuous improvement, and will revisit design elements every 6 months and measures every 3 months - ENERGY has amended the TPA with the Affordability Fund Trust to require use of the Ontario logo in Fund marketing and communications and is waiting for the Trustees to sign-back

Item	Key Deliverables / Considerations	Timing / Next Steps
		- Report back to TB/MBC through the PRRT process with final program details and a performance management framework including outcome measures and targets Late 2017/early 2018: - ENERGY can apply for additional funds through an in-year TB submission based on performance and need. Trust term can be extended with amended/new TPA if agreed by Trust
5) Bill Presentment (SNAP/LSB)		
ENERGY	<u>Recent Action Items</u> Ongoing Ministry work re bill presentment	2017-2018 – Bill redesign
6) Expanding ICI (ESP/COMs)		
ENERGY, LSB, IESO and LDCs	<u>Recent Action Items</u> - Ongoing OCC outreach campaign to promote ICI - Ministry review OCC proposal to expand ICI outreach program - Ongoing outreach with LDCs being undertaken by IESO - CME proposal (TBD)	Quarterly Report Backs re ICI to TBS / MBC
7) Energy Sector Efficiencies (i.e., Ontario Energy Board and IESO) (SNAP / ESP)		
ENERGY, LSB, OEB and IESO	OEB: - Directive / Letter (TBD) <u>Considerations</u> - Signal efficiencies intent in OEB business plan letter - Work with OEB/LDCs on LTEP document and proposed directive to OEB	Continue this work as part of 2017 LTEP implementation

Item	Key Deliverables / Considerations	Timing / Next Steps
	- Mandate Review implementation is an opportunity to reiterate expectations. IESO: - Directive / Letter (TBD) <u>Considerations</u> - IESO's stakeholder engagement re Market Renewal is ongoing.	

Ontario Fair Hydro Plan Implementation



* Note: Preliminary timeline with tentative dates that are subject to change.

0

Outstanding Business Issues – Ontario Fair Hydro Plan

Issue	Overview	Supporting Documentation	Next Steps
Guarantees	Province to provide contingent supports to enable structure	- Draft Term Sheet - Performance Guarantee - Service Guarantee	- OPG/MOF/ENE to discuss respective comments on the term sheet - ENE/MOF tracking to TB in September for approval Timing: TBD
Equity Injection	Province to purchase shares of OPG on a monthly basis	- Master Subscription Agreement - Service Level Agreement - Notice of Subscription - Amendment to Articles	OFA / Energy to determine required monthly process and sign-off mechanism Timing: TBD
PILs Exemption	Province to mitigate cost to ratepayers by minimizing PILs payable by OPG financing vehicle	Tax Regulation	MOF legal to draft comfort letter and regulation Timing: Regulation by fall
Subordinated Debt Loan Agreement	OPG will lend the equity injection from the Province to the Trust by way of subordinated debt	- Draft Term Sheet - Debt Loan Arrangement	- OFA to provide comments - OPG to draft Debt Loan Arrangement Timing: TBD

Outstanding Business Issues – Ontario Fair Hydro Plan

Issue	Overview	Supporting Documentation	Next Steps
Guarantees	Province to provide contingent supports to enable structure	- Draft Term Sheet - Performance Guarantee - Service Guarantee	- OPG/MOF/ENE to discuss respective comments on the term sheet - ENE/MOF tracking to TB in September for approval Timing: TBD
Equity Injection	Province to purchase shares of OPG on a monthly basis	- Master Subscription Agreement - Service Level Agreement - Notice of Subscription - Amendment to Articles	OFA / Energy to determine required monthly process and sign-off mechanism Timing: TBD
PILs Exemption	Province to mitigate cost to ratepayers by minimizing PILs payable by OPG financing vehicle	Tax Regulation	MOF legal to draft comfort letter and regulation Timing: Regulation by fall
Subordinated Debt Loan Agreement	OPG will lend the equity injection from the Province to the Trust by way of subordinated debt	- Draft Term Sheet - Debt Loan Arrangement	- OFA to provide comments - OPG to draft Debt Loan Arrangement Timing: TBD

Outstanding Business Issues – Ontario Fair Hydro Plan

Issue	Overview	Supporting Documentation	Next Steps
Guarantees	Province to provide contingent supports to enable structure	- Draft Term Sheet - Performance Guarantee - Service Guarantee	- OPG/MOF/ENE to discuss respective comments on the term sheet - ENE/MOF tracking to TB in September for approval Timing: Sept 26 TB/MBC
Equity Injection	Province to purchase shares of OPG on a monthly basis	- Master Subscription Agreement - Service Level Agreement - Notice of Subscription - Amendment to Articles	OFA / Energy to determine required monthly process and sign-off mechanism Timing: Late Sept/Early Oct
PILs Exemption	Province to mitigate cost to ratepayers by minimizing PILs payable by OPG financing vehicle	Tax Regulation	MOF legal to draft comfort letter and regulation Timing: Regulation by fall
Subordinated Debt Loan Agreement	OPG will lend the equity injection from the Province to the Trust by way of subordinated debt	- Draft Term Sheet - Debt Loan Arrangement	- OFA to provide comments - OPG to draft Debt Loan Arrangement Timing: Late Sept
OEB Rate & Fees	OPG is allowed to charge a management fee for its services made up of 1)base fee and 2) performance fee	- Draft Base Fee framework - Draft Performance Fee framework - Regulation	OPG, ENE and OFA to determine role of OEB in determining fees OPG charges Timing: Regulation by the fall

Outstanding Business Issues – Ontario Fair Hydro Plan

Issue	Overview	Supporting Documentation	Next Steps
Provincial Protection and Assurance Agreement	Province to provide contingent supports to enable structure	- Draft Term Sheet - Performance Guarantee - Service Guarantee	MOF / ENE to finalize Protection Agreement based on Term Sheet approved by TB/CAB. Timing: Fall for finalization of Protection Agreement
Equity Injection	Province to purchase shares of OPG on a monthly basis	- Master Subscription Agreement - Service Level Agreement - Notice of Subscription - Amendment to Articles	OFA / ENE to determine required monthly process and sign-off mechanism Timing: October for internal provincial mechanism
PILs Exemption	Province to mitigate cost to ratepayers by minimizing PILs payable by OPG financing vehicle	Tax Regulation	MOF legal to draft comfort letter and regulation (currently with MOF for review) Timing: Fall for regulation
Subordinated Debt Loan Agreement	OPG will lend the equity injection from the Province to the Trust by way of subordinated debt	- Draft Term Sheet - Debt Loan Arrangement	- OFA to provide comments - OPG to draft Debt Loan Arrangement Timing: Fall
OPG Management Fees	OPG is allowed to charge a management fee for its services made up of 1)base fee and 2) variable fee 3) Third-party costs (e.g. banking fees)	- Draft Base Fee framework - Draft Variable Fee framework - Amendments to Ontario Regulation 206/17	ENE, OPG, OEB and OFA working to develop proposed regulatory amendments which would determine role of OEB in determining fees OPG charges Timing: Proposed regulation expected to be reviewed at October 16 / 30 LRC (TBD)
OPG Fees and Interest Recovery	OPG accounting advice that interest and fees must be recovered during “inflationary cap” period for GA Refinancing to proceed as planned under the OFHPA. Note: Net impact on ratepayers will be zero	Amendments to Ontario Regulation 206/17 (i.e., general regulation). Note: No longer proposing to amend GA regulation	ENE, OPG, IESO and OFA working to develop proposed regulatory amendments which would enable fees and interest amounts to be recovered during the Inflationary Cap period.. Timing: Proposed regulatory amendments to be reviewed at October 16 / 30 LRC (TBD)

Outstanding Business Issues – Ontario Fair Hydro Plan

Issue	Overview	Supporting Documentation	Next Steps
Provincial Protection and Assurance Agreement	Province to provide contingent supports to enable structure	- Draft Term Sheet - Performance Guarantee - Service Guarantee	MOF / ENE to finalize Protection Agreement based on Term Sheet approved by TB/CAB. Timing: Fall for finalization of Protection Agreement
Equity Injection	Province to purchase shares of OPG on a monthly basis	- Master Subscription Agreement - Service Level Agreement - Notice of Subscription - Amendment to Articles	OFA / ENE to determine required monthly process and sign-off mechanism Timing: October for internal provincial mechanism
PILs Exemption	Province to mitigate cost to ratepayers by minimizing PILs payable by OPG financing vehicle	Tax Regulation	MOF legal to draft comfort letter and regulation (currently with MOF for review) Timing: Fall for regulation
Subordinated Debt Loan Agreement	OPG will lend the equity injection from the Province to the Trust by way of subordinated debt	- Draft Term Sheet - Debt Loan Arrangement	- OFA to provide comments - OPG to draft Debt Loan Arrangement Timing: Fall
OPG Management Fees	OPG is allowed to charge a management fee for its services made up of 1)base fee and 2) variable fee 3) Third-party costs (e.g. banking fees)	- Draft Base Fee framework - Draft Variable Fee framework - Amendments to Ontario Regulation 206/17	ENE, OPG, OEB and OFA working to develop proposed regulatory amendments which would determine role of OEB in determining fees OPG charges Timing: Proposed regulation expected to be reviewed at October 16 / 30 LRC (TBD)
OPG Fees and Interest Recovery	OPG accounting advice that interest and fees must be recovered during “inflationary cap” period for GA Refinancing to proceed as planned under the OFHPA. Note: Net impact on ratepayers will be zero	Amendments to Ontario Regulation 206/17 (i.e., general regulation). Note: No longer proposing to amend GA regulation	ENE, OPG, IESO and OFA working to develop proposed regulatory amendments which would enable fees and interest amounts to be recovered during the Inflationary Cap period.. Timing: Proposed regulatory amendments to be reviewed at October 16 / 30 LRC (TBD)

Outstanding Business Issues – Ontario Fair Hydro Plan

Issue	Overview	Supporting Documentation	Next Steps
Provincial Protection and Assurance Agreement	Province to provide contingent supports to enable structure	- Draft Term Sheet - Performance Guarantee - Service Guarantee	MOF / ENE to finalize Protection Agreement based on Term Sheet approved by TB/CAB. Timing: In advance of OPG Board Meeting on November 13, 2017
Equity Injection	Province to purchase shares of OPG on a monthly basis	- Master Subscription Agreement - Service Level Agreement - Notice of Subscription - Amendment to Articles	OFA / ENE to determine required monthly process and sign-off mechanism Timing: October for internal provincial mechanism
PILs Exemption	Province to mitigate cost to ratepayers by minimizing PILs payable by OPG financing vehicle	Tax Regulation	MOF legal to draft comfort letter and regulation (currently with MOF for review) Timing: Fall for regulation
Subordinated Debt Loan Agreement	OPG will lend the equity injection from the Province to the Trust by way of subordinated debt	- Draft Term Sheet - Debt Loan Arrangement	- OFA to provide comments - OPG to draft Debt Loan Arrangement Timing: Fall
OPG Management Fees / OPG Fees and Interest Recovery	OPG is allowed to charge a management fee for its services, which will account for the amount of debt issued, OPG performance, fees charged for comparable services, and ensure OPG operates on a commercial basis.	- Amendments to Ontario Regulation 206/17 (General) - Amendments to O. Reg. 206/17 (General)	- ENE, OPG, OEB and OFA finalized regulatory amendments to enable OPG to establish and charge fees in its role as Financial Service Matter (FSM), provide a methodology for the calculation of those fees and define the role of the OEB in reviewing and approving those fees - Regulatory amendments were also finalized to enable the FSM to recover fees and interest amounts from IESO

	OPG accounting advice that interest and fees must be recovered during “inflationary cap” period for GA Refinancing to proceed as planned under the OFHPA. Note: Net impact on ratepayers during the inflationary cap period will be zero		during the inflationary cap period, and would enable IESO to record such amounts in the variance account Timing: LRC on October 30, 2017
Acceleration and Negative Fair Allocation Amounts (FAA)	OPG has advised that additional amendments to O. Reg. 206/17 (General) may be required to satisfy accounting requirements, that would address unintended consequences of negative FAA amounts and the impacts of a potential acceleration	Amendments to O. Reg. 206/17 (General)	ENE and OPG considering further amendments to the General Reg. Timing: LRC on November 20, 2017 and/or December 2017
Letter of Credit	OPG has advised that an IESO Letter of Credit is required to backstop smaller Local Distribution Companies (LDCs) that do not have credit ratings	Amendments to O. Reg. 429/04	ENE, IESO, and OPG considering amendments to O. Reg. 429/04 to enable the recovery of Letter of Credit carrying costs from specified consumers Timing: LRC on November 20, 2017 and/or December 2017

Outstanding Business Issues – Ontario Fair Hydro Plan

Issue	Overview	Supporting Documentation	Next Steps
Provincial Protection and Assurance Agreement	Province to provide contingent supports to enable structure	- Draft Term Sheet - Performance Guarantee - Service Guarantee	MOF / ENE to finalize Protection Agreement based on Term Sheet approved by TB/CAB. Timing: September 25 – TB/MBC / September 27 – CAB Fall for finalization of Protection Agreement
Equity Injection	Province to purchase shares of OPG on a monthly basis	- Master Subscription Agreement - Service Level Agreement - Notice of Subscription - Amendment to Articles	OFA / ENE to determine required monthly process and sign-off mechanism Timing: OPG Board meeting September 29 (Master Subscription Agreement) October for internal provincial mechanism
PILs Exemption	Province to mitigate cost to ratepayers by minimizing PILs payable by OPG financing vehicle	Tax Regulation	MOF legal to draft comfort letter and regulation (currently with MOF for review) Timing: Regulation by fall
Subordinated Debt Loan Agreement	OPG will lend the equity injection from the Province to the Trust by way of subordinated debt	- Draft Term Sheet - Debt Loan Arrangement	- OFA to provide comments - OPG to draft Debt Loan Arrangement Timing: Late September
OPG Management Fees	OPG is allowed to charge a management fee for its services made up of 1)base fee and 2) performance fee	- Draft Base Fee framework - Draft Performance Fee framework - Regulation	ENE, OPG, OEB and OFA working to develop proposed regulation which would determine role of OEB in determining fees OPG charges Timing: Proposed regulation expected to be reviewed at October 16 LRC.
OPG Fees and Interest Recovery	OPG accounting advice that interest and fees must be recovered during “inflationary cap” period for GA Refinancing to	- Amendments to Ontario Regulation 429/04 - Amendments to OFHPA Regulations	ENE, OPG, OEB, IESO and OFA working to develop proposed regulatory amendments which would enable fees and interest amounts to be recovered via Global Adjustment (GA).

	proceed as planned under the OFHPA. Note: Net impact on ratepayers will be zero.		Timing: Proposed regulation expected to be reviewed at October 16 LRC.

Implementation of Ontario's Fair Hydro Plan

Week of March 6, 2017

Item	Key Deliverables / Considerations	Timing / Next Steps
1) Refinancing the Global Adjustment (ESP/IGS)		
ENERGY, LSB, IESO, OPG, OEB, TBS and MOF	- Legislation: - Defining mitigation and recovery mechanism; and - Establishing roles for IESO, OPG and OEB - Regulation (amend O.Reg.429/04) - Shareholder Declaration and Resolution - Third Party Technical Report re Long Lived Assets (TBD) - Accounting opinions from E&Y (OPG) and KPMG (IESO) - Financing: - IESO line of credit to bridge from May-July; - OEFC to OPG equity injection structure; and - OPG trust rating agency review and 3rd party lender market sounding (e.g., cost/term, etc) <u>Considerations</u> - GA refinancing legislation could also include legislative changes to enable broadening of RRRP, expanding of OESP and establishing of FN delivery credit. - Ongoing legal, accounting and financing risk assessments. - Impact on Electricity Sector Dedicated Income. - OEB-RPP Filing in May 2017. OEB may also be required to set new GA rate for RPP-eligible consumers.	- Report back to TBC/MBC by spring 2017, prior to going to LRC with any legislation, on the approach to refinance GA (per TBC/MBC Minute) - Report to TBC/MBC, LRC and Cabinet in spring 2017 (per Cabinet Minute) - Provide comfort level to allow OEB to include in May 2017 RPP - Summer 2017 implementation (June/July). OPG preference for July 1 to align with quarter-end
2) Broadening Rural or Remote Rate Protection (RRRP) (SNAP)		
ENERGY, LSB and LDCs	- Legislation - Regulation (TBD) <u>Considerations</u> - Consideration of revising definitions of RRRP program for broadening to other LDCs and continue to have current structure	- Report back to TB/MBC by Spring 2017 - Fall 2017 implementation (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
	in place to provide to existing consumers in Algoma and Remotes. - Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF. - Work with LDCs to consider any bill messaging.	
3) Expanding Ontario Electricity Support Program (OESP) (SNAP)		
ENERGY, LSB and OEB	- Legislation - Regulation (TBD) <u>Considerations</u> - Reach out to OEB to consider whether surplus funding of ~\$100M could be used to increase OESP credits by 50%. Regulation can be updated quickly (need to consider whether posting on EBR is required). - Consider whether revised directive needed to continue having OEB administer program. - Legislation required to have program funded by taxpayers. - Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF.	- Report back to TB/MBC by Spring 2017 - Program in place in 2017 (per Cabinet Minute)
4) Providing a First Nations On-Reserve Delivery Credit (SNAP)		
ENERGY and LSB	- Legislation - Regulation (TBD) <u>Considerations</u> - Work with LDCs on implementation details that need to be captured in legislation. - Legislation required to have program funded by taxpayers. - Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF. - Work with LDCs to consider any bill messaging.	- Report back to TB/MBC by Spring 2017 with final program details, including performance management framework, and clarifying how the programs aligns with the significant OEB estimate of program costs, from \$13M to \$20M - Program in place in 2017 (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
5) Establishing an Affordability Fund (CRED)		
ENERGY, IGS, LSB, TBS, MOF and H1	- TBC/MBC Submission - Trust Structure - Transfer Payment Agreement (multi-party) <u>Considerations</u> - Legislative changes not required. - Funding needs to flow to the Trust prior to March 31, 2017.	Week of March 6, 2017: - TBC/MBC <u>approval</u> (March 6th) <u>CAB approval (March 8th)</u> - Follow up calls with <u>several LDCs and EDA group</u> to <u>provide updates and outline proposed principles for the Fund</u> ~~discuss Trust principles (principles to be reflected in the Trust Deed)~~ - Ongoing engagement with Hydro One, LSB, OPCD, CSD on <u>principles and establishment of Trust and development of <u>Transfer Payment Agreement (TPA)</u></u> (including sharing of drafts for comment); ~~Confirm Trust principles with Hydro One~~ Week of March 13, 2017: - Hydro One to finalize establishment of Trust <u>by March 17th</u> - Continue development of <u>TPA Agreement</u>, including circulating near to final version by March 17th

Formatted: Bulleted + Level: 1 + Aligned at: 0 cm + Indent at: 0.63 cm

Formatted: Superscript

Item	Key Deliverables / Considerations	Timing / Next Steps
		Week of March 20, 2017: - Execute TPA between the Ministry and the Trust Agreement by Hydro One, the Trust and the Ministry by March 22nd - Initiate process to- flow funds to the Trust; to be completed before March 31st April to May 2017: Additional trustees to be appointment; Trust develops further details, e.g. specific customer eligibility criteria and processes for LDCs to apply for funds; to be developed in consultation with LDCs June 2017: - Report back to TB/MBC with final program details and a performance management framework including outcome measures and targets Summer 2017: - LDCs begin to apply to the Trust for funds
6) Expanding ICI (ESP)		
ENERGY, LSB, IESO and LDCs	- Regulation (amend O.Reg.429/04) - Regulatory Registry (RR) posting Considerations	- RR posting on the proposed amendment - Report back to TBC/MBC by

Item	Key Deliverables / Considerations	Timing / Next Steps
	- Amendments need to be in effect as much in advance of the consumer notification date to impact electricity bills this year (May 15, 2017). - RR posting is typically a minimum of 45-days for all regulatory changes affecting business to allow for review/comment. Note: RR posting is not a legal requirement but a best practice. - Working with the Ontario Chamber of Commerce on a targeted outreach campaign.	spring 2017 (per TBC/MBC Minute) - LRC [DATE] - Effective May 2017 (TBD)
7) Energy Sector Efficiencies (i.e., Ontario Energy Board and IESO) (SNAP / ESP)		
ENERGY, LSB, OEB and IESO	OEB: - Directive / Letter (TBD) <u>Considerations</u> - Signal efficiencies intent in OEB business plan letter - Work with OEB/LDCs on LTEP document and proposed directive to OEB IESO: - Directive / Letter (TBD) <u>Considerations</u> - Opportunity to highlight Market Renewal in the next LTEP. - IESO's stakeholder engagements on Market Renewal is ongoing. - Moving away from a two schedule system could impact consumer prices depending on implementation. - Most of the savings accrue from the move to a capacity auction. These savings do not materialize until the province has capacity requirements.	Continue this work as part of LTEP

Item	Key Deliverables / Considerations	Timing / Next Steps
8) Additional Initiatives for Small Business and Industrials (i.e., Class B) (ESP)		
ENERGY, MEDG, MOF, MOECC, MOL and Small Business	- Identify additional opportunities to assist Class B electricity consumers and small and medium sized manufacturers' <u>Considerations</u> - TBD	Report back to TBC/MBC and Cabinet in spring 2017 (per Cabinet Minute)
9) Initiatives for Tenants (SNAP)		
ENERGY and MOH	- Explore ways to provide direct assistance to tenants that are not sub-metered and do not directly benefit under the existing and proposed rate mitigation programs <u>Considerations</u> - MHO leading any legislative/regulatory changes needed to have tenants benefit from program. Consider whether benefits are limited to 8% and GA (rather than OESP which is harder to provide to tenants who do not pay their bills). - ENERGY working with MCSS to streamline/automate enrollment for ODSP/OW consumers into OESP.	Report back to TBC/MBC and Cabinet in spring 2017 (Per Cabinet Minute)
10) Stakeholder/Agency Outreach (Communications)		
ENERGY	- Minister's letters to: - Ratepayers; - LDCs; - Business (e.g., OCC, CME, Concerned Manufactures, etc); and - Agencies (i.e., IESO, OPG, OEB and H1)	Early-mid March
11) FAO Engagement		
ENERGY, MOF/OFA, FAO	Provide FAO staff with a technical briefing on the OFHP	March 9, 2017: Preliminary discussion.

Implementation of Ontario's Fair Hydro Plan

Week of March 6, 2017

Item	Key Deliverables / Considerations	Timing / Next Steps
1) Refinancing the Global Adjustment (ESP/IGS)		
ENERGY, LSB, IESO, OPG, OEB, TBS and MOF	- Legislation: - Defining mitigation and recovery mechanism; and - Establishing roles for IESO, OPG and OEB - Regulation (amend O.Reg.429/04) - Shareholder Declaration and Resolution - Third Party Technical Report re Long Lived Assets (TBD) - Accounting opinions from E&Y (OPG) and KPMG (IESO) - Financing: - IESO line of credit to bridge from May-July; - OEFC to OPG equity injection structure; and - OPG trust rating agency review and 3rd party lender market sounding (e.g., cost/term, etc) <u>Considerations</u> - GA refinancing legislation could also include legislative changes to enable broadening of RRRP, expanding of OESP and establishing of FN delivery credit. - Ongoing legal, accounting and financing risk assessments. - Impact on Electricity Sector Dedicated Income. - OEB-RPP Filing in May 2017. OEB may also be required to set new GA rate for RPP-eligible consumers.	- Report back to TBC/MBC by spring 2017, prior to going to LRC with any legislation, on the approach to refinance GA (per TBC/MBC Minute) - Report to TBC/MBC, LRC and Cabinet in spring 2017 (per Cabinet Minute) - Provide comfort level to allow OEB to include in May 2017 RPP - Summer 2017 implementation (June/July). OPG preference for July 1 to align with quarter-end
2) Broadening Rural or Remote Rate Protection (RRRP) (SNAP)		
ENERGY, LSB and LDCs	- Legislation - Regulation (TBD) <u>Considerations</u> - Consideration of revising definitions of RRRP program for broadening to other LDCs and continue to have current structure	- Report back to TB/MBC by Spring 2017 - Fall 2017 implementation (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
	in place to provide to existing consumers in Algoma and Remotes. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF. • Work with LDCs to consider any bill messaging.	
3) Expanding Ontario Electricity Support Program (OESP) (SNAP)		
• ENERGY, LSB and OEB	• Legislation • Regulation (TBD) <u>Considerations</u> • Reach out to OEB to consider whether surplus funding of ~\$100M could be used to increase OESP credits by 50%. Regulation can be updated quickly (need to consider whether posting on EBR is required). • Consider whether revised directive needed to continue having OEB administer program. • Legislation required to have program funded by taxpayers. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF.	• Report back to TB/MBC by Spring 2017 • Program in place in 2017 (per Cabinet Minute)
4) Providing a First Nations On-Reserve Delivery Credit (SNAP)		
• ENERGY and LSB	• Legislation • Regulation (TBD) <u>Considerations</u> • Work with LDCs on implementation details that need to be captured in legislation. • Legislation required to have program funded by taxpayers. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF. • Work with LDCs to consider any bill messaging.	• Report back to TB/MBC by Spring 2017 with final program details, including performance management framework, and clarifying how the programs aligns with the significant OEB estimate of program costs, from \$13M to \$20M • Program in place in 2017 (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
5) Establishing an Affordability Fund (CRED)		
ENERGY, IGS, LSB, TBS, MOF and H1	- TBC/MBC Submission - Trust Structure - Transfer Payment Agreement (multi-party) <u>Considerations</u> - Legislative changes not required. - Funding needs to flow to the Trust prior to March 31, 2017.	Week of March 6, 2017: - TBC/MBC approval (March 6th) - CAB approval (March 8th) - Follow up calls with several LDCs and EDA to provide updates and outline proposed principles for the Fund (Ongoing engagement with Hydro One, LSB, OPCD, CSD on principles and establishment of Trust and development of Transfer Payment Agreement (TPA) (including sharing of drafts for comment); Week of March 13, 2017: - Hydro One to finalize establishment of Trust by March 17th - Continue development of TPA, including circulating near to final version by March 17th Week of March 20, 2017: - Execute TPA between the Ministry and the Trust by March 22nd - Initiate process to flow funds to the Trust; to be completed before March 31st

Item	Key Deliverables / Considerations	Timing / Next Steps
		April to May 2017: - Additional trustees to be appointment; Trust develops further details, e.g. customer eligibility criteria and processes for LDCs to apply for funds; to be developed in consultation with LDCs June 2017: - Report back to TB/MBC with final program details and a performance management framework including outcome measures and targets Summer 2017: - LDCs begin to apply to the Trust for funds
6) Expanding ICI (ESP)		
ENERGY, LSB, IESO and LDCs	- Regulation (amend O.Reg.429/04) - Regulatory Registry (RR) posting <u>Considerations</u> - Amendments need to be in effect as much in advance of the consumer notification date to impact electricity bills this year (May 15, 2017). - RR posting is typically a minimum of 45-days for all regulatory changes affecting business to allow for review/comment. Note: RR posting is not a legal requirement but a best practice. - Working with the Ontario Chamber of Commerce on a targeted outreach campaign.	- RR posting on the proposed amendment - Report back to TBC/MBC by spring 2017 (per TBC/MBC Minute) - LRC [DATE] - Effective May 2017 (TBD)

Item	Key Deliverables / Considerations	Timing / Next Steps
7) Energy Sector Efficiencies (i.e., Ontario Energy Board and IESO) (SNAP / ESP)		
ENERGY, LSB, OEB and IESO	OEB: - Directive / Letter (TBD) <u>Considerations</u> - Signal efficiencies intent in OEB business plan letter - Work with OEB/LDCs on LTEP document and proposed directive to OEB IESO: - Directive / Letter (TBD) <u>Considerations</u> - Opportunity to highlight Market Renewal in the next LTEP. - IESO's stakeholder engagements on Market Renewal is ongoing. - Moving away from a two schedule system could impact consumer prices depending on implementation. - Most of the savings accrue from the move to a capacity auction. These savings do not materialize until the province has capacity requirements.	Continue this work as part of LTEP
8) Additional Initiatives for Small Business and Industrials (i.e., Class B) (ESP)		
ENERGY, MEDG, MOF, MOECC, MOL and Small Business	- Identify additional opportunities to assist Class B electricity consumers and small and medium sized manufacturers' <u>Considerations</u> - TBD	Report back to TBC/MBC and Cabinet in spring 2017 (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
9) Initiatives for Tenants (SNAP)		
ENERGY and MOH	- Explore ways to provide direct assistance to tenants that are not sub-metered and do not directly benefit under the existing and proposed rate mitigation programs <u>Considerations</u> - MHO leading any legislative/regulatory changes needed to have tenants benefit from program. Consider whether benefits are limited to 8% and GA (rather than OESP which is harder to provide to tenants who do not pay their bills). - ENERGY working with MCSS to streamline/automate enrollment for ODSP/OW consumers into OESP.	Report back to TBC/MBC and Cabinet in spring 2017 (Per Cabinet Minute)
10) Stakeholder/Agency Outreach (Communications)		
ENERGY	- Minister's letters to: - Ratepayers; - LDCs; - Business (e.g., OCC, CME, Concerned Manufactures, etc); and - Agencies (i.e., IESO, OPG, OEB and H1)	Early-mid March
11) FAO Engagement		
ENERGY, MOF/OFA, FAO	Provide FAO staff with a technical briefing on the OFHP	March 9, 2017: Preliminary discussion.

Implementation of Ontario's Fair Hydro Plan

Week of March 6, 2017

Item	Key Deliverables / Considerations	Timing / Next Steps
1) Refinancing the Global Adjustment (ESP/IGS)		
ENERGY, LSB, IESO, OPG, OEB, TBS and MOF	- Legislation: - Defining mitigation and recovery mechanism; and - Establishing roles for IESO, OPG and OEB - Regulation (amend O.Reg.429/04) - Shareholder Declaration and Resolution - Third Party Technical Report re Long Lived Assets (TBD) - Accounting opinions from E&Y (OPG) and KPMG (IESO) - Financing: - IESO line of credit to bridge from May-July; - OEFC to OPG equity injection structure; and - OPG trust rating agency review and 3rd party lender market sounding (e.g., cost/term, etc) <u>Considerations</u> - GA refinancing legislation could also include legislative changes to enable broadening of RRRP, expanding of OESP and establishing of FN delivery credit. - Ongoing legal, accounting and financing risk assessments. - Impact on Electricity Sector Dedicated Income. - OEB-RPP Filing in May 2017. OEB may also be required to set new GA rate for RPP-eligible consumers.	- Report back to TBC/MBC by spring 2017, prior to going to LRC with any legislation, on the approach to refinance GA (per TBC/MBC Minute) - Report to TBC/MBC, LRC and Cabinet in spring 2017 (per Cabinet Minute) - Provide comfort level to allow OEB to include in May 2017 RPP - Summer 2017 implementation (June/July). OPG preference for July 1 to align with quarter-end
2) Broadening Rural or Remote Rate Protection (RRRP) (SNAP)		
ENERGY, LSB and LDCs	- Legislation - Regulation (TBD) <u>Considerations</u> - Consideration of revising definitions of RRRP program for broadening to other LDCs and continue to have current structure	- Report back to TB/MBC by Spring 2017 - Fall 2017 implementation (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
	in place to provide to existing consumers in Algoma and Remotes. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF. • Work with LDCs to consider any bill messaging.	
3) Expanding Ontario Electricity Support Program (OESP) (SNAP)		
• ENERGY, LSB and OEB	• Legislation • Regulation (TBD) <u>Considerations</u> • Reach out to OEB to consider whether surplus funding of ~\$100M could be used to increase OESP credits by 50%. Regulation can be updated quickly (need to consider whether posting on EBR is required). • Consider whether revised directive needed to continue having OEB administer program. • Legislation required to have program funded by taxpayers. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF.	• Report back to TB/MBC by Spring 2017 • Program in place in 2017 (per Cabinet Minute)
4) Providing a First Nations On-Reserve Delivery Credit (SNAP)		
• ENERGY and LSB	• Legislation • Regulation (TBD) <u>Considerations</u> • Work with LDCs on implementation details that need to be captured in legislation. • Legislation required to have program funded by taxpayers. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF. • Work with LDCs to consider any bill messaging.	• Report back to TB/MBC by Spring 2017 with final program details, including performance management framework, and clarifying how the programs aligns with the significant OEB estimate of program costs, from \$13M to \$20M • Program in place in 2017 (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
5) Establishing an Affordability Fund (CRED)		
ENERGY, IGS, LSB, TBS, MOF and H1	- TBC/MBC Submission - Trust Structure - Transfer Payment Agreement (multi-party) <u>Considerations</u> - Legislative changes not required. - Funding needs to flow to the Trust prior to March 31, 2017.	Week of March 6, 2017: - TBC/MBC approval (March 6th) - CAB approval (March 8th) - Follow up calls with several LDCs and EDA to provide updates and outline proposed principles for the Fund (Ongoing engagement with Hydro One, LSB, OPCD, CSD on principles and establishment of Trust and development of Transfer Payment Agreement (TPA) (including sharing of drafts for comment); Week of March 13, 2017: - Hydro One to finalize establishment of Trust by March 17th - Continue development of TPA, including circulating near to final version by March 17th Week of March 20, 2017: - Execute TPA between the Ministry and the Trust by March 22nd - Initiate process to flow funds to the Trust; to be completed before March 31st

Item	Key Deliverables / Considerations	Timing / Next Steps
		April to May 2017: - Additional trustees to be appointment; Trust develops further details, e.g. customer eligibility criteria and processes for LDCs to apply for funds; to be developed in consultation with LDCs June 2017: - Report back to TB/MBC with final program details and a performance management framework including outcome measures and targets Summer 2017: - LDCs begin to apply to the Trust for funds
6) Expanding ICI (ESP)		
ENERGY, LSB, IESO and LDCs	- Regulation (amend O.Reg.429/04) - Regulatory Registry (RR) posting <u>Considerations</u> - Amendments need to be in effect as much in advance of the consumer notification date to impact electricity bills this year (May 15, 2017). - RR posting is typically a minimum of 45-days for all regulatory changes affecting business to allow for review/comment. Note: RR posting is not a legal requirement but a best practice. - Working with the Ontario Chamber of Commerce on a targeted outreach campaign.	- RR posting on the proposed amendment - Report back to TBC/MBC by spring 2017 (per TBC/MBC Minute) - LRC [DATE] - Effective May 2017 (TBD)

Item	Key Deliverables / Considerations	Timing / Next Steps
7) Energy Sector Efficiencies (i.e., Ontario Energy Board and IESO) (SNAP / ESP)		
ENERGY, LSB, OEB and IESO	OEB: - Directive / Letter (TBD) <u>Considerations</u> - Signal efficiencies intent in OEB business plan letter - Work with OEB/LDCs on LTEP document and proposed directive to OEB IESO: - Directive / Letter (TBD) <u>Considerations</u> - Opportunity to highlight Market Renewal in the next LTEP. - IESO's stakeholder engagements on Market Renewal is ongoing. - Moving away from a two schedule system could impact consumer prices depending on implementation. - Most of the savings accrue from the move to a capacity auction. These savings do not materialize until the province has capacity requirements.	Continue this work as part of LTEP
8) Additional Initiatives for Small Business and Industrials (i.e., Class B) (ESP)		
ENERGY, MEDG, MOF, MOECC, MOL and Small Business	- Identify additional opportunities to assist Class B electricity consumers and small and medium sized manufacturers' <u>Considerations</u> - TBD	Report back to TBC/MBC and Cabinet in spring 2017 (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
9) Initiatives for Tenants (SNAP)		
ENERGY and MOH	- Explore ways to provide direct assistance to tenants that are not sub-metered and do not directly benefit under the existing and proposed rate mitigation programs <u>Considerations</u> - MHO leading any legislative/regulatory changes needed to have tenants benefit from program. Consider whether benefits are limited to 8% and GA (rather than OESP which is harder to provide to tenants who do not pay their bills). - ENERGY working with MCSS to streamline/automate enrollment for ODSP/OW consumers into OESP.	Report back to TBC/MBC and Cabinet in spring 2017 (Per Cabinet Minute)
10) Stakeholder/Agency Outreach (Communications)		
ENERGY	- Minister's letters to: - Ratepayers; - LDCs; - Business (e.g., OCC, CME, Concerned Manufactures, etc); and - Agencies (i.e., IESO, OPG, OEB and H1)	Early-mid March
11) FAO Engagement		
ENERGY, MOF/OFA, FAO	Provide FAO staff with a technical briefing on the OFHP	March 9, 2017: Preliminary discussion.

Implementation of Ontario's Fair Hydro Plan

Week of March 6, 2017

Item	Key Deliverables / Considerations	Timing / Next Steps
1) Refinancing the Global Adjustment (ESP/IGS)		
ENERGY, LSB, IESO, OPG, OEB, TBS and MOF	- Legislation: - Defining mitigation and recovery mechanism; and - Establishing roles for IESO, OPG and OEB - Regulation (amend O.Reg.429/04) - Shareholder Declaration and Resolution - Third Party Technical Report re Long Lived Assets (TBD) - Accounting opinions from E&Y (OPG) and KPMG (IESO) - Financing: - IESO line of credit to bridge from May-July; - OEFC to OPG equity injection structure; and - OPG trust rating agency review and 3rd party lender market sounding (e.g., cost/term, etc) <u>Considerations</u> - GA refinancing legislation could also include legislative changes to enable broadening of RRRP, expanding of OESP and establishing of FN delivery credit. - Ongoing legal, accounting and financing risk assessments. - Impact on Electricity Sector Dedicated Income. - OEB-RPP Filing in May 2017. OEB may also be required to set new GA rate for RPP-eligible consumers.	- Report back to TBC/MBC by spring 2017, prior to going to LRC with any legislation, on the approach to refinance GA (per TBC/MBC Minute) - Report to TBC/MBC, LRC and Cabinet in spring 2017 (per Cabinet Minute) - Provide comfort level to allow OEB to include in May 2017 RPP - Summer 2017 implementation (June/July). OPG preference for July 1 to align with quarter-end
2) Broadening Rural or Remote Rate Protection (RRRP) (SNAP)		
ENERGY, LSB and LDCs	- Legislation - Regulation (TBD) <u>Considerations</u> - Consideration of revising definitions of RRRP program for broadening to other LDCs and continue to have current structure	- Report back to TB/MBC by Spring 2017 - Fall 2017 implementation (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
	in place to provide to existing consumers in Algoma and Remotes. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF. • Work with LDCs to consider any bill messaging.	
3) Expanding Ontario Electricity Support Program (OESP) (SNAP)		
• ENERGY, LSB and OEB	• Legislation • Regulation (TBD) <u>Considerations</u> • Reach out to OEB to consider whether surplus funding of ~\$100M could be used to increase OESP credits by 50%. Regulation can be updated quickly (need to consider whether posting on EBR is required). • Consider whether revised directive needed to continue having OEB administer program. • Legislation required to have program funded by taxpayers. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF.	• Report back to TB/MBC by Spring 2017 • Program in place in 2017 (per Cabinet Minute)
4) Providing a First Nations On-Reserve Delivery Credit (SNAP)		
• ENERGY and LSB	• Legislation • Regulation (TBD) <u>Considerations</u> • Work with LDCs on implementation details that need to be captured in legislation. • Legislation required to have program funded by taxpayers. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF. • Work with LDCs to consider any bill messaging.	• Report back to TB/MBC by Spring 2017 with final program details, including performance management framework, and clarifying how the programs aligns with the significant OEB estimate of program costs, from \$13M to \$20M • Program in place in 2017 (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
5) Establishing an Affordability Fund (CRED)		
ENERGY, IGS, LSB, TBS, MOF and H1	- TBC/MBC Submission - Trust Structure - Transfer Payment Agreement (multi-party) <u>Considerations</u> - Legislative changes not required. - Funding needs to flow to the Trust prior to March 31, 2017.	Week of March 6, 2017: - TBC/MBC <u>approval</u> (March 6th) <u>CAB approval (March 8th)</u> - Follow up call with LDC group to discuss Trust principles (principles to be reflected in the Trust Deed) - Ongoing engagement with Hydro One, LSB, OPCD, CSD on establishment of Trust and development of Agreement (including sharing of drafts for comment) - Confirm Trust principles with Hydro One Week of March 13, 2017: - Hydro One to finalize establishment of Trust - Continue development of Agreement, including circulating near to final version by March 17th Week of March 20, 2017: - Execute Agreement by Hydro One, the Trust and the Ministry by March 22nd

Item	Key Deliverables / Considerations	Timing / Next Steps
		- Initiate process to flow funds to the Trust; to be completed before March 31st April to May 2017: - Trust develops specific customer eligibility criteria and processes for LDCs to apply for funds; to be developed in consultation with LDCs June 2017: - Report back to TB/MBC with final program details and a performance management framework including outcome measures and targets Summer 2017: - LDCs begin to apply to the Trust for funds
6) Expanding ICI (ESP)		
ENERGY, LSB, IESO and LDCs	- Regulation (amend O.Reg.429/04) - Regulatory Registry (RR) posting <u>Considerations</u> - Amendments need to be in effect as much in advance of the consumer notification date to impact electricity bills this year (May 15, 2017). - RR posting is typically a minimum of 45-days for all regulatory changes affecting business to allow for review/comment. Note: RR posting is not a legal requirement but a best practice. - Working with the Ontario Chamber of Commerce on a targeted outreach campaign.	- RR posting on the proposed amendment - Report back to TBC/MBC by spring 2017 (per TBC/MBC Minute) - LRC [DATE] - Effective May 2017 (TBD)

Item	Key Deliverables / Considerations	Timing / Next Steps
7) Energy Sector Efficiencies (i.e., Ontario Energy Board and IESO) (SNAP / ESP)		
ENERGY, LSB, OEB and IESO	OEB: - Directive / Letter (TBD) <u>Considerations</u> - Signal efficiencies intent in OEB business plan letter - Work with OEB/LDCs on LTEP document and proposed directive to OEB IESO: - Directive / Letter (TBD) <u>Considerations</u> - Opportunity to highlight Market Renewal in the next LTEP. - IESO's stakeholder engagements on Market Renewal is ongoing. - Moving away from a two schedule system could impact consumer prices depending on implementation. - Most of the savings accrue from the move to a capacity auction. These savings do not materialize until the province has capacity requirements.	Continue this work as part of LTEP
8) Additional Initiatives for Small Business and Industrials (i.e., Class B) (ESP)		
ENERGY, MEDG, MOF, MOECC, MOL and Small Business	- Identify additional opportunities to assist Class B electricity consumers and small and medium sized manufacturers' <u>Considerations</u> - TBD	Report back to TBC/MBC and Cabinet in spring 2017 (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
9) Initiatives for Tenants (SNAP)		
ENERGY and MOH	- Explore ways to provide direct assistance to tenants that are not sub-metered and do not directly benefit under the existing and proposed rate mitigation programs <u>Considerations</u> - MHO leading any legislative/regulatory changes needed to have tenants benefit from program. Consider whether benefits are limited to 8% and GA (rather than OESP which is harder to provide to tenants who do not pay their bills). - ENERGY working with MCSS to streamline/automate enrollment for ODSP/OW consumers into OESP.	Report back to TBC/MBC and Cabinet in spring 2017 (Per Cabinet Minute)
10) Stakeholder/Agency Outreach (Communications)		
ENERGY	- Minister's letters to: - Ratepayers; - LDCs; - Business (e.g., OCC, CME, Concerned Manufactures, etc); and - Agencies (i.e., IESO, OPG, OEB and H1)	Early-mid March
11) FAO Engagement		
ENERGY, MOF/OFA, FAO	Provide FAO staff with a technical briefing on the OFHP	March 9, 2017: Preliminary discussion.

Action Items – May 4

1) GA Refinancing

- Leg Counsel finalizing legislation
- LSB working on:
 - o Committee motions
 - o Regulations – 2 parts (mid and late June). Note: OPG has sketched out what it may require in regulation
 - o Indemnities for OPG and IESO Board members to be in place around Royal Assent
- Ministry working on approval documents for Minister signature for end of week:
 - o LRC / Cabinet Submission on OFH Legislation
 - o TB/MBC Report Back – GA refinancing, Social programs and ICI. Note: TB looking for variability risk analysis for Social programs
 - o Ministry to share drafts by end of week
- OPG and IESO's independent accounting work is complete:
 - o OPG is finalizing E&Y's work
 - o IESO has finalized KPMG's work
 - o Agencies are each working a one page summary that could be released publically
- OPG to meet with OAG next Thursday (TBC); OAG request to IESO for emails has been expanded
- OPG on track with Board meeting on May 12 to approve recommendation
- OPG guarantees won't be negotiated until a later stage and guarantee for market disruption is still in play

2) Other OFHP Initiatives

- RRRP, OESP and FN:
 - o Ministry received final legislation, which includes information sharing provision with MCSS
 - o Ministry working with LDCs to finalize program design
- Affordability Fund:
 - o Ministry reaching out to social agencies
- ICI:
 - o Ministry promoting value of ICI (i.e., at upcoming OCC Annual General meeting)
 - o Ministry discussing with CME ongoing

3) Other Items

- OEB's cannot reset prices until regulation is public, but work will happen in the background to ensure a common understanding of regulations
- Regulation tracking for direct to Cabinet on June 14th (TBC)
- Ministry to follow up with stakeholder on rate cap

Action Items

January 11, 2017

1) GA Refinancing

o General Business Update (OPG / IESO / ENERGY)

- ENERGY to provide consolidated comments to OPG on the reference documentation on January 12th
 - OPG expected to launch its marketing activities on January 22nd (i.e., by disclosing documents used in the marketing road show) and start its cross Canada road show on the 29th (i.e., Montreal / Toronto / Winnipeg / Vancouver)
 - Pricing would happen on February Feb-5th or 6th
 - Transaction would close the week of February 12th
 - ~~ENERGY to provide consolidated comments to OPG on the reference documentation~~
- #### o OPG's Market Activities – Rollout (All)
- OPG aims to do technical briefing the week of February 12th (after the transaction close)
 - OPG to develop Fact Sheet / News Release
 - OPG / Ministry to develop QAs
 - OPG / Ministry to revise technical briefing deck

2) Public Accounts (All)

- Responses to recommendations due back to TBS on January 19th and the committee on February 14th

2)3) Other OFHP Initiatives

o RRRP, OESP and FN (SNAP)

- OESP tracking to the Jan-January 23rd LRC
- RRRP and RNDC implemented

o Affordability Fund (CRED)

- Trustees meeting scheduled for Jan-January 12th

Rate Mitigation Implementation Follow Ups / Next Steps: Wednesday March 15, 2017

1) GA Financing

- a) OPG
 - a. OPG to continue to work with rating agencies / OFA on debt financing issues
 - b. ESPD and IESO work with OPG in the development of OPG's detailed financial model, by providing details related to modeling/forecasting assumptions, customer data, etc
 - c. OPG special Board committee to meet on March 17, 2017
 - d. OPG to work through requirements for a shareholder resolution / declaration
- b) IESO
 - a. IESO to work through technical aspects with IT (i.e., operationalizing the back-office functions)
 - b. IESO to work with KPMG in the development of a formal opinion once first draft of legislation is available
- c) OEB
 - a. OEB to draft comfort letter regarding May 1 – Regulated Price Plan (RPP)
 - b. OEB to draft RPP communique to be released publicly by April 20, 2017
 - c. OEB to issue OESP orders in early April
- d) Legislative drafting
 - a. LSB / Blakes will continue to work through legislative drafting issues
 - b. LSB to consider contempt of legislature issue

2) Affordability Fund

- a. Blakes to review Trust deed
- b. Tracking to have TPA / other documents finalized by end of next week

3) RRRP / OESP / FN

- a. SNAP to continue to work through OESP automatic qualification with MCSS / OEB
- b. SNAP to continue to work with CRA on OESP wet signature and provide MO with what is needed from CRA for CoS meeting with PMO this week / SNAP also to engage with MOF
- c. SNAP to convene first RRRP sub-committee meeting next week
- d. SNAP to continue to monitor rate hearings for RRRP LDCs

- e. SNAP to move forward with including COO in FN rate implementation / work through implementation issues

4) ICI

- a. ESP working to finalize materials for LRC on April 11, 2017
- b. Communications to finalize TPA with OCC / ESP to consider providing support to CME
- c. ESP to work with other ministries regarding other measures that can be considered for SMEs
- d. ESP to consider implications of dropping below 500kw threshold due to investments in conservation

5) Other items

- a. ENERGY to participate in briefing of OAGO

WEEKLY RATE MITIGATION IMPLEMENTATION GROUP

January 11, 2017

Agenda

- 1) GA Refinancing
 - o General Business Update (OPG / IESO / ENERGY)
 - o OPG's Market Activities – Rollout (All)
- 2) Public Accounts (All)
- 3) Other OFHP Initiatives
 - o RRRP, OESP and FN (SNAP)
 - o Affordability Fund (CRED)

Notes:

WEEKLY RATE MITIGATION IMPLEMENTATION GROUP

April 6, 2017

Agenda

- 1) GA Refinancing
 - o Legislative Drafting (LSB)
 - o OPG Update
 - o IESO Update
 - o OEB Update

- 2) OFHP Initiatives
 - o Affordability Fund (CRED)
 - o RRRP, OESP and FN (SNAP)
 - o ICI (ESPD)

- 3) Bill Presentment (SNAP)

- 4) Update on Action Items / Policy Matrix

Notes:

WEEKLY RATE MITIGATION IMPLEMENTATION GROUP

April 20, 2017

Agenda

- 1) GA Refinancing
 - o Legislative Drafting (LSB / Blakes)
 - o OPG Update
 - o IESO Update
 - o OEB Update

- 2) Other OFHP Initiatives
 - o RRRP, OESP and FN (SNAP)
 - o Affordability Fund (CRED)
 - o ICI (ESPD)

- 3) Update on Action Items / Policy Matrix

Notes:

WEEKLY RATE MITIGATION IMPLEMENTATION GROUP

April 6, 2017

Agenda

- 1) GA Refinancing
 - o Legislative Drafting (LSB)
 - o OPG Update
 - o IESO Update
 - o OEB Update

- 2) OFHP Initiatives
 - o Affordability Fund (CRED)
 - o RRRP, OESP and FN (SNAP)
 - o ICI (ESPD)

- 3) Bill Presentment (SNAP)

- 4) Update on Action Items / Policy Matrix

Notes:

WEEKLY RATE MITIGATION IMPLEMENTATION GROUP

April 13, 2017

Agenda

- 1) GA Refinancing
 - o Legislative Drafting (LSB / Blakes)
 - o OPG Update
 - o IESO Update
 - o OEB Update
- 2) OPG Letter
- 3) Other OFHP Initiatives
 - o Affordability Fund (CRED)
 - o RRRP, OESP and FN (SNAP)
 - o ICI (ESPD)
- 4) Update on Action Items / Policy Matrix

Notes:

Q/A Response – Ontario Chamber of Commerce

Q/ Who is eligible for Global Adjustment (GA) refinancing under Ontario's Fair Hydro Program?

All electricity consumers eligible for the Regulated Price Plan (RPP) would be eligible for GA refinancing. This includes residential consumers, most small businesses and farms.

Consumers who have opted out of the RPP to sign contracts with electricity retailers or become wholesale consumers would be eligible; however, their savings could be more or less than 25% depending on their consumption, local distribution company and cost of retail contract.

Can we add a bit more per the DM comment, in particular, so it address OCC membership confusion.

Q/ There appears to be some confusion over if the 25% reduction will apply to business. From the briefing yesterday it states that many small business and farms will also benefit from this reduction and that the rate increase freeze applies to everyone for the next 4 years. Our question is for industrial use (ie. anyone not on the fixed prices but is on the spot prices) if you pay a GA line item on the bill, will you see a benefit from the GA smoothing?

Under Ontario's Fair Hydro Plan, electricity consumers eligible for the Regulated Price Plan (RPP) would be eligible for Global Adjustment refinancing and would benefit from shifting the funding for electricity support programs (e.g., Ontario Electricity Support Program) to provincial revenues receive a benefit from the funding of support programs through provincial revenues. The proposal would also hold bill increases in line with inflation for four years.

To be eligible for the RPP, annual consumption must be below 250,000kWh/year or peak demand must be below 50 kW. This includes residential consumers as well as most small businesses and farms.

Eligible small businesses would include dry cleaners, convenience stores, small restaurants and retail stores, but would exclude businesses such as larger restaurants, welding shops, medium and large office buildings and big box retailers. Consumers who are eligible for RPP, but have opted out to become a retail or wholesale consumer would also receive the benefit.

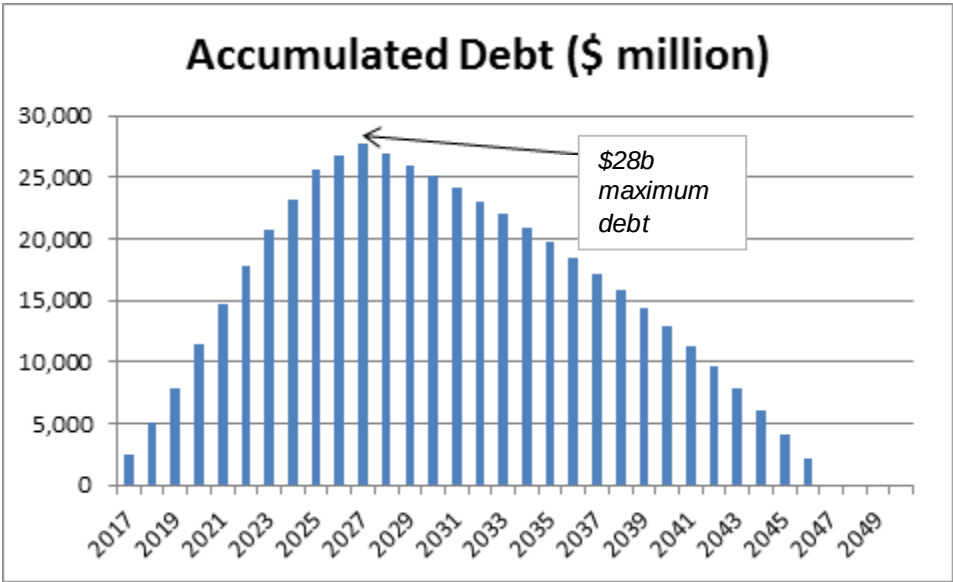
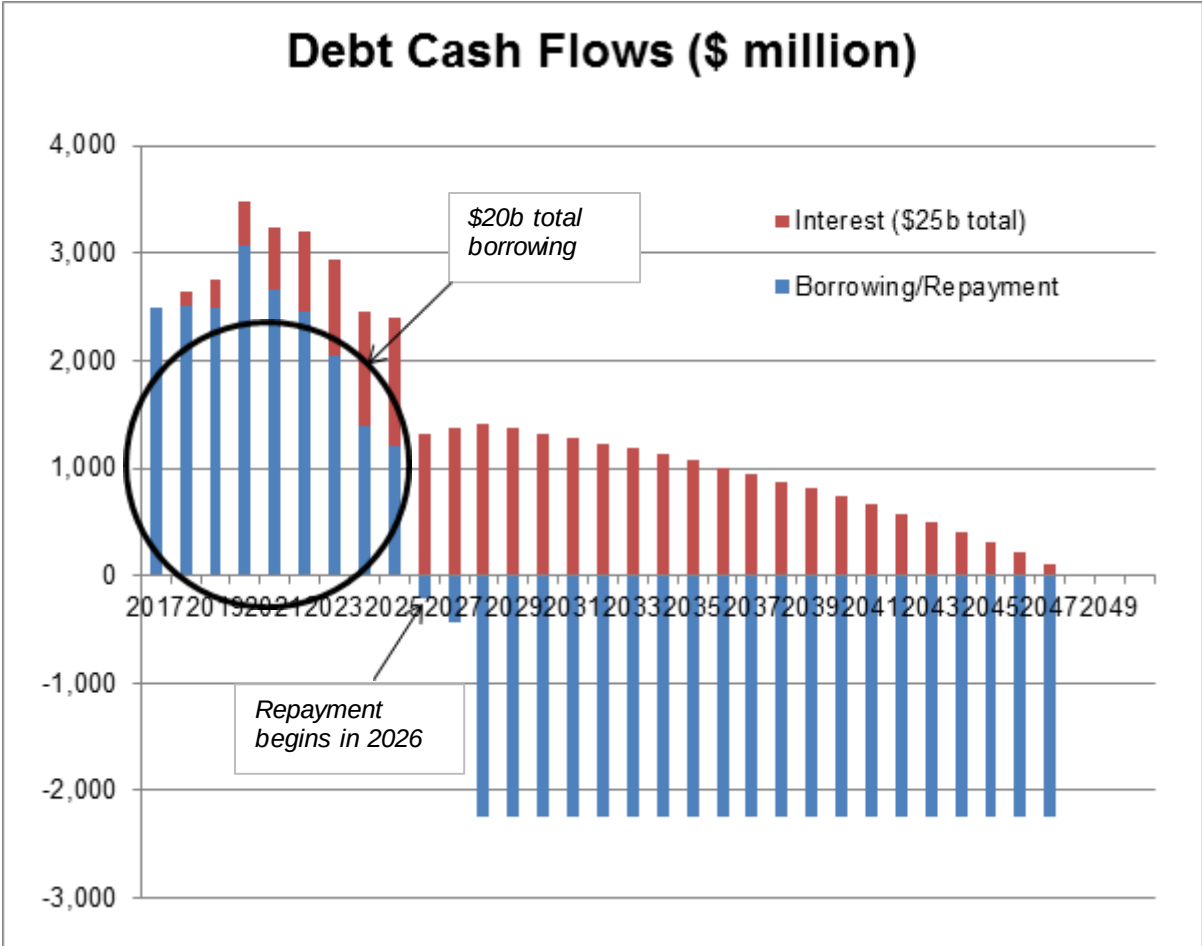
Q/ The first is just a better understanding of what the ICI expansion will mean. We are seeking to better understand the eligibility requirements, such as, will it only applicable to NAICS codes 31-33? Can other businesses who meet this new threshold qualify? What is the proposed timeline for implementation and qualification for the new expansion? Essentially we are just looking to be able to better communicate the impact to our members.

As announced in Ontario's Fair Hydro Plan, we are expanding the Industrial Conservation Initiative (ICI) to include smaller manufacturers and industrials with peak demands between

500 kW and 1 MW that operate under the North American Industry Classification System (NAICS) codes 31 - 33 (i.e., Manufacturing).

Final details on timelines will be available once the regulation is developed and approved.

The two analysis charts shows the accumulation of debt and payment of interest on a year by year basis for the GA refinancing:



Premier's Remarks

It is why I have been so focused lately on lowering the high price people are paying for hydro.

Government after government has made mistakes in our electricity system.

I include myself in that category.

Rebuilding the system after decades of underinvestment was the right thing to do.

But we shouldn't have asked today's generation of ratepayers to absorb all the costs of building a clean, reliable grid.

We've made some changes over the last few years but they didn't do enough.

*Bills kept jumping up because we were paying for \$50 billion worth of new energy infrastructure **that was built over a the past** decade and a half.*

It meant this generation of ratepayers was paying for the mistakes of the past and subsidizing future ratepayers paying for generating assets, who are going to that will benefit from these assets for decades future generations.

So we're refinancing.

*We're spreading **some of** those costs out over a more reasonable time period.*

*That is going to bring monthly bills down by an average of 25 per cent, **including the 8% rebate that took effect at the beginning of the year.***

*And we're going to cap increases at **the rate of inflation, which we expect to be about** two per cent a year for at least four years so that bills don't jump back up again.*

Ontario's economy is growing.

Our budget will be balanced this spring.

What better way to use that hard-earned financial strength than by giving households and business a long overdue break on their hydro bills?

It is one way we can make sure that growth is more inclusive — a tangible way to show that the benefits of growth can be shared.

That our economy can grow fairer.

Q. Who is eligible for Global Adjustment refinancing under Ontario's Fair Hydro Program?

All electricity consumers eligible for the Regulated Price Plan (RPP) would be eligible for GA refinancing. This includes residential consumers, most small businesses and farms.

Consumers who have opted out of the RPP to sign contracts with electricity retailers or become wholesale consumers would be eligible; however, their savings could be more or less than 25% depending on their consumption, local distribution company and cost of retail contract.

Q. Is the MUSH sector eligible for the Fair Hydro Plan?

Most municipalities, university, schools and hospitals (MUSH) electricity consumers would not be eligible for the Global Adjustment refinancing portion of Ontario's Fair Hydro Plan as they are generally too large to be eligible for the Regulated Price Plan (RPP).

MUSH consumers would benefit from shifting the funding for electricity support programs (e.g., Ontario Electricity Support Program) to provincial revenues.

Q. What are the timelines for Ontario's Fair Hydro Program with respect to refinancing the Global Adjustment? What happens after the first four years?

The refinancing of the Global Adjustment (GA) is proposed to be implemented by the summer of 2017. The proposal would hold bill increases in line with inflation for four years for Regulated Price Plan (RPP)-eligible consumers.

Over this 4-year period there is a good deal of certainty over the costs and composition of the electricity sector. Beyond this period, uncertainty grows as supply mix, commodity prices and demand levels become more difficult to forecast.

Any accumulated debt would be paid off over a 30-year period.

Q/ The \$1.4 billion in annual interest cost, how did the Ministry arrive at this number?

In the early years of the Global Adjustment (GA) refinancing, a portion of the costs covered by the GA would be refinanced to reduce pressure on today's electricity ratepayers. In later years, the cost of refinancing would be recovered from ratepayers.

Under current forecasts, the immediate reduction in the GA would be about \$2.5 billion per year on average over the first 10 years, with annual interest costs not exceeding \$1.4 billion. This figure was arrived at by calculating the interest that would accrue on the debt at its highest level. **Note:** A 5% interest rate is assumed.

Speaking Points

Refinancing the Global Adjustment

Ontario is lowering electricity bills by about 25% for families, farms and small businesses as part of a significant system restructuring that will address long-standing policy challenges and ensure greater fairness. A typical residential consumer would see an immediate savings of about \$26/month.

Decades of under-investment in the electricity system by governments of all stripes resulted in the need to make significant investments in generation, transmission and distribution assets.

In addition, an important decision was made to eliminate Ontario's use of coal and creating clean, renewable power. At least **\$50 billion** has been invested to ensure the system is clean and reliable. The costs of these investments were funded in part through the Global Adjustment (GA).

The majority of the province's electricity generators are under 20-year contracts. Many of these generators will be able to operate past their contract life.

By recognizing that generation assets are expected to continue to provide benefit to future ratepayers, beyond the term of current contracts, future ratepayers are expected to be able to utilize these assets and reduce the need to finance the development of new generation assets.

To relieve the current burden on ratepayers and share costs more fairly, a portion of the GA is being refinanced. Refinancing the GA will provide significant and immediate rate relief by spreading the cost of electricity investments over a longer period of time. In the early years, a portion of the costs covered by the GA would be financed to reduce pressure on electricity ratepayers. In the later years, when some system costs are expected to be reduced due to continued operation of existing assets under 20-year contracts, the cost of financing would be recovered from ratepayers. Under current forecasts, the immediate reduction (i.e., the financed portion) in the GA would be about \$2.5 billion per year on average over the first ten years.

The government intends to introduce legislation to enable the Independent Electricity System Operator (IESO) and the Ontario Power Generation (OPG) to work together to refinance the GA over a longer period of time. The legislation would also outline the role of the Ontario Energy Board (OEB).

The following entities would implement the Global Adjustment smoothing mechanism:

- The Independent Electricity System Operator (IESO) would establish the regulatory account
 - o IESO as the administrator of the Global Adjustment, would establish a new deferral account enabled in legislation
- Ontario Power Generation (OPG) would acquire the deferral account from IESO
 - o OPG has experience working with large financial assets and liabilities including jointly managing nuclear funds.
 - o That expertise, combined with its strong balance sheet allows OPG to effectively to manage this mechanism
- In addition, the OPG would borrow from Ontario Electricity Financial Corporation (OEFC) and from outside lenders to refinance GA.
 - o OPG would have the ability to find the least cost and most effective method and source of financing, including OEFC and external lenders.

- Ontario Energy Board (OEB) would provide a level of oversight.
 - o As the independent regulator, OEB would review customer bill impacts resulting from this mechanism

Industrial Conservation Initiative

The benefit of expanded the Industrial Conservation Initiative (ICI) to include electricity consumers between 500kW and 1MW under the North American Industry Classification System (or NAICS) codes 31-33, is that small manufactures and industrials will become eligible for ICI.

Examples of sectors under North American Industry Classification System (NAICS) codes 31-33 (i.e., manufacturing) that are likely to have electricity consumers in the 500 kW-1 MW range are:

- Food and beverage (e.g., Maple Leafs Foods);
- Apparel;
- Plastics and rubber;
- Computers and electronics;
- Transportation equipment;
- Fabricated metal products (e.g., Automatic Coating);
- Chemicals; and
- Wood products.

Work List

- Fiscal Prep / Monday
 - o Update Cab Sub
 - o Update GA Smoothing
 - o OPG Sensitivity Analysis
- Cab Sub
 - o Minute / MEDG Language
 - o Updated Submission
- GA Smoothing
 - o Interest on Debt
 - o Role of OEB / Regulated Asset
 - o Con Law Option
 - o Accounting
 - o Legislation
- Agencies
 - o OPG Sensitivity Analysis
- Announcement
 - o Technical Briefing Deck

WEEKLY RATE MITIGATION IMPLEMENTATION GROUP

March 9, 2017

Agenda

- 1) Governance / Delivery Structure – Overview (ESPD)
- 2) GA Refinancing
 - o Overview of US models (Blakes)
 - o OPG Update
 - o IESO Update
 - o Legislative Drafting (LSB)
- 3) Affordability Fund (CRED)
- 4) RRRP, OESP and FN (SNAP)
- 5) ICI (ESPD)

Notes:

WEEKLY RATE MITIGATION IMPLEMENTATION GROUP

March 15, 2017

Agenda

- 1) GA Refinancing
 - o OPG Update
 - o IESO Update
 - o OPG Update
 - o Legislative Drafting (LSB / Blakes)
- 2) Affordability Fund (CRED)
- 3) RRRP, OESP and FN (SNAP)
- 4) ICI (ESPD)

Notes:

WEEKLY RATE MITIGATION IMPLEMENTATION GROUP

March 23, 2017

Agenda

- 1) GA Refinancing
 - o Legislative Drafting (LSB / Blakes)
 - o OPG Update
 - o IESO Update
 - o OEB Update
- 2) Affordability Fund (CRED)
- 3) RRRP, OESP and FN (SNAP)
- 4) ICI (ESPD)
- 5) Update on Action Items / Policy Matrix

Notes:

WEEKLY RATE MITIGATION IMPLEMENTATION GROUP

March 30, 2017

Agenda

- 1) GA Refinancing
 - o Legislative Drafting (LSB / Blakes)
 - o OPG Update
 - o IESO Update
 - o OEB Update
- 2) Affordability Fund (CRED)
- 3) RRRP, OESP and FN (SNAP)
 - o Mechanics and timing of moving RRPP from ratebase to taxbase
- 4) ICI (ESPD)
- 5) Update on Action Items / Policy Matrix

Notes:

WEEKLY RATE MITIGATION IMPLEMENTATION GROUP

May 4, 2017

Agenda

- 1) GA Refinancing
 - o Legislative Drafting (LSB)
 - o OPG Update
 - o IESO Update
 - o OEB Update

- 2) Other OFHP Initiatives
 - o RRRP, OESP and FN (SNAP)
 - o Affordability Fund (CRED)
 - o ICI (ESPD)

- 3) Update on Action Items / Policy Matrix

Notes:

STANDING COMMITTEE ON PUBLIC ACCOUNTS

*Chapter 2, Public Accounts of the Province
Key Messages, Q&A Response and Issues
February 2018*

KEY MESSAGES

Ontario's Fair Hydro Plan

- The government has been making important investments in a cleaner and more reliable energy system, but these investments have led to higher electricity bills.
- Ontario's Fair Hydro Plan has lowered electricity bills by 25 per cent for the typical residential consumer, and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.
- These measures include the 8 per cent rebate introduced in January 2017 and build on previously announced initiatives to deliver broad-based rate relief on all electricity bills.
- Lower-income Ontarians and those living in eligible rural communities are receiving even greater reductions, as much as 40 to 50 per cent.
- Taken together, these changes have delivered the single largest reduction to electricity rates in Ontario's history.

Records Disclosure/Process

- The Ministry of Energy conducted a records search consistent with the 40 plus search terms provided by the Auditor General (AG).
- The Ministry selected McCarthys/Wortzmans to assist with processing and analysis of approximately 2.2 million records that resulted from the search of 81 custodians. The Ministry provided all responsive records to the AG (i.e., more than 73,000 emails).
- The Ministry provided regularly the AG with batches of responsive documents. The Ministry completed its response to the AG on October 26, 2017.

Affordability Fund / Arm's Length Trusts

- A Trust structure was selected to implement the Affordability Fund in order to provide an effective solution to distributing funds to electricity distributors. With approximately 65 distributors across Ontario, it was not feasible for the Province to enter into agreements with each distributor.
- The Trust structure establishes an independent entity with expertise from the electricity distributor and community sectors.

- In terms of governance and accountability, there are report-back requirements on the use of funds transferred as well as the ability for the government to conduct an audit to gain assurance that the funds have been used for the purposes intended.

Electricity Bill Re-Design

- Electricity bills are a customer's main window into the electricity system. Through the 2017 Long-Term Energy Plan (2017 LTEP) consultation process, the Ministry of Energy heard that customers found their bills confusing and inaccessible.
- The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills. Comparisons of costs from previous billing periods will continue to be possible.
- Hydro One has been a leader in consumer research on ways to improve the appearance and comprehension of its bill. Hydro One enlisted the services of a behavioural research firm and engaged with thousands of customers to develop a new bill design which has been observed to increase customer satisfaction and comprehension.
- Building on this research, the Ministry of Energy launched the Bill Redesign Action Plan with the aim of revising the regulatory framework on invoicing to improve the value of electricity bills for consumers. The Ministry continues to engage with industry and consumers to better understand consumer concerns and preferences with respect to the bill to ensure that any proposed changes to the bill's design will meet consumer's needs.

Q&AS RESPONSE

Ontario's Fair Hydro Plan

Q. Why did the government introduce Ontario's Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

To address the impact of our electricity system investments on consumers, OFHP includes:

- Refinancing the Global Adjustment (GA) over a longer term period for Regulated Price Plan (RPP) eligible consumers, including families, small businesses and farms.
- Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill. Eligible consumers will receive additional funding through assistance programs including:
 - o Establishing a new Affordability Fund which will support Ontarians who are not eligible for the [Home Assistance Program](#) and who have difficulty paying their electricity bills.
 - o Broadening Rural or Remote Rate Protection (RRRP) to provide distribution charge relief for the customers of the local distribution companies (LDCs) with the highest distribution charges.
 - o Expanding the Ontario Electricity Support Program (OESP) to increase participation and provide further assistance to eligible participants.
 - o Establishing a new On-Reserve First Nations Delivery Rate.
- Improving sector efficiency and modernizing Ontario's electricity market, working in collaboration with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).
- Any rate increases over the next four years will be held to the rate of inflation.

In the development of Ontario's Fair Hydro Plan, the government made the policy decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity social programs, such as OESP and RRRP. At the same time, the government also made a policy decision that these new measures would be more appropriately funded from the tax-base, not the rate-base.

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

If pressed on the cost of these new and enhanced social programs:

On March 2, 2017, the government publicly announced the enhancement of the existing OESP and RRRP and the new Affordability Fund and on-reserve First Nations delivery credit. At the time, the government indicated that these new measures would cost the government up to \$2.5 billion over the next three years.

Q. Why is the government refinancing the Global Adjustment? It seems like overly complex way to provide lower electricity rates.

To reduce pressure on today's electricity consumers, a portion of Global Adjustment (GA) costs is being refinanced. In later years, the cost of financing will be recovered from consumers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that the province has made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of Ontario Fair Hydro Plan (OFHP) is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

In developing the policy to refinance the GA, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

If pressed:

Ontario's Fair Hydro Plan (OFHP) operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. You say the \$4 billion Financial Accountability Office (FAO) number is wrong? So how much will it cost?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

The \$4 billion³ figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Since a number of variables (i.e., including interest rates, electricity demand and electricity costs) will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program

The Ontario Power Generation (OPG), who has been identified as the Financial Services Manager (FMS) responsible for the financing plans and the Fair Hydro Trust (i.e., entity that will manage the debt obligations), has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

If pressed on the details of the revised peak debt number and interest costs:

Peak debt for OFHP has been revised down from March 2017, from about \$ 28 billion⁴ to approximately \$20 billion⁵. The higher March 2017 estimate was used by the FAO in its May 2017 report. The estimates of total interest cost also decreased from \$25 billion⁶ to less than \$19 billion⁷.

Updated estimates are consistent with 2017 Long-Term Energy Plan (2017 LTEP) projections, and include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

³ Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

⁴ Ministry of Energy

⁵ Ministry of Energy

⁶ Ministry of Energy

⁷ Ministry of Energy

Q. How does the 3.357 per cent price of the Ontario Power Generation's Fair Hydro Trust's first issuance of senior notes compare with the Ministry of Energy's Fair Allocation Amount (FAA) assumptions?

A number of inputs will vary over the thirty-year life of the Global Adjustment (GA) refinancing program and will continue to be revised to reflect changing conditions (e.g., changes in interest rates).

The Ministry analysis underpinning the *2017 Fair Allocation Amount* (2017 FAA) included a 5.0 per cent average interest rate over the life of the GA refinancing program (i.e., 30 years). Note: Navigant's modelling of GA refinancing assumed an interest rate of 4.5 per cent. In the development of the 2017 FAA the interest rate assumptions were revised to 5 per cent based on consultations with OPG.

On February 6, 2017, OPG announced that it was able to secure an interest rate of 3.357 per cent for the senior debt on its first issuance that has a 15 year term and a value of \$500 million.

On February 8, 2017, OPG advised that the remainder of the debt is split between \$382 million of "subordinated" debt at an interest rate of 3.637 per cent and \$98 million of "junior subordinated" debt at 3.957 per cent.

The effective interest rate of 3.526 per cent is the weighted average of these three series of debt (i.e., senior, subordinated and junior subordinated).

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Wouldn't it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG currently manages approximately \$20 billion⁸ in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

In addition, OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan (OFHP) initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors⁹, including major investors in the Canadian power and utility bonds market.

⁸ Ontario Financing Authority

⁹ Ontario Power Generation

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than \$2 billion¹⁰ and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

If pressed, details of OPG's Fair Hydro Trust's first successful issuance:

On February 6, 2017, OPG announced that it was able to secure an interest rate of 3.357 per cent for the senior debt on its first issuance that has a 15 year term and a value of \$500 million.

On February 8, 2017, OPG advised that the remainder of the debt is split between \$382 million of "subordinated" debt at an interest rate of 3.637 per cent and \$98 million of "junior subordinated" debt at 3.957 per cent.

The effective interest rate of 3.526 per cent is the weighted average of these three series of debt (i.e., senior, subordinated and junior subordinated).

Q. Who was involved in the policy and implementation of refinancing the Global Adjustment?

In developing Ontario's Fair Hydro Plan (OFHP) and the policy to refinance the GA, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

In addition, senior officials and staff from several departments and agencies, led by the Ministry of Energy, met regularly in the development of the policy and structure of OFHP.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

Ontario's Fair Hydro Plan (OFHP) operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

¹⁰ Ontario Power Generation

Q. When do we start paying the clean energy adjustment?

In order to ensure the cost of investments in the electricity are allocated fairly amongst current and future ratepayers, a portion of Global Adjustment (GA) costs is being refinanced.

Beginning in 2021, financing costs will be recovered from consumers through the clean energy adjustment, while borrowing will continue until approximately 2028.

Q. Does OPG make money running the Fair Hydro Trust?

Ontario Power Generation was identified as the Financial Services Manager (FSM) responsible for the Financing Plans and the financing entity (i.e., Fair Hydro Trust) that will manage the debt obligations under the Global Adjustment (GA) refinancing program.

OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

Under the *Ontario Fair Hydro Plan Act, 2017* and associated regulations, OPG is permitted to charge fees in its role as FSM. This ensures OPG is able to recover costs incurred in relation to its activities as FSM. The methodology for the calculation of fees is set out in regulation and includes performance-based components. The regulation also sets out the role of the Ontario's Energy Board (OEB) in reviewing and approving the fees.

In accordance with Ontario Power Generation's Financing Plan, 49 per cent of the debt obligations are purchased by OPG, funded by periodic equity injections from the Province and OPG's own corporate borrowing program.

OPG earns a return on its investment in the Trust, which ensures the transactions are commercial and meet accounting requirements. The remaining 51 per cent of the debt obligations are funded through the capital markets.

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. Global Adjustment (GA) refinancing was designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. How much is the tax-base paying to keep electricity rates low? Aren't these cost that should be borne by the rate-base?

In the development of Ontario's Fair Hydro Plan, the government made the decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity support programs, such as the Ontario Electricity Support Program (OESP) and Rural or Remote Rate Protection (RRRP).

At the same time, the government also made a policy decision that cost recovery for OESP and the majority of RRRP should be shifted off electricity bills to provincial revenues. This decision has lowered regulatory charges on all electricity bills by approximately \$3/MWh.

The OESP and RRRP are programs designed to support electricity consumers that are most vulnerable to increasing electricity costs. The government's decision to fund these programs through provincial revenues was taken in recognition of the fact that these programs are for the common good and are more appropriately supported by the tax-base rather than the rate-base.

Commented [HS(1)]: Is this previously approved language?

Similarly, the 8 per cent rebate, introduced in January 2017, is also funded through provincial revenues in recognition of the social, environmental and economic goals that were achieved through the transformation of the electricity system, including the phase out of coal-fired electricity generation.

Commented [HS(2)]: Do we want to use the "equivalent" language?

On the other hand, given that the policy objective of GA refinancing is to more fairly allocate the cost of our investments over the useful life, not the contractual term, of electricity generating assets, it was our primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the refinancing of electricity assets.

If pressed on the cost of the new and enhanced social programs:

On March 2, 2017, the government publicly announced the enhancement of the existing OESP and RRRP, the new Affordability Fund, and on-reserve First Nations delivery credit. At the time, the government indicated that these new measures would cost the government up to \$2.5 billion over the next three years.

Over this same three year period, the 8 per cent rebate was forecast to cost the government roughly \$1 billion dollar per year.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a clean, reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's renewable electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that renewable generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets. This is the basis for the spreading of the costs across present and future generations of rate-payers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Records Disclosure / Process

Q. Why has the Ministry of Energy not provided all e-mails requested by the Auditor General?

The Ministry of Energy completed its response to the AG on October 26, 2017. The Ministry has provided all responsive records (more than 73,000 emails) to the AG.

Q. How much money did the Ministry spend on lawyers?

Although the retainer agreement includes a cap of up to \$500,000, the Ministry of Energy spent approximately \$150,000 on the retainer.

Q. What was the Ministry of Energy's process for providing the emails requested by the Auditor General?

The Ministry conducted a search consistent with the 40 plus search terms provided to the AG. In order to manage the approximately 2.2 million records resulted from the search of 81 custodians, the Ministry of Energy selected McCarthys/Wortzmans to assist with processing and analysis of the documents.

No legal advice on relevancy of documents was provided by Wortzmans. The Ministry completed its response to the AG on October 26, 2017.

Affordability Fund

Q. Why is there a need for an Affordability Fund?

From 2015 to early 2017, electricity distributors and other stakeholders indicated to the government that there was an immediate need to help customers struggling with their electricity bills, such as those in bill arrears and facing service disconnection.

Electricity distributors reported to the Ontario Energy Board (OEB) that around 56,500 customers were disconnected in 2015 and over 58,000 customers were disconnected in 2016. Electricity distributors also reported about 400,000 residential electricity accounts in arrears in 2016.

In January 2017, Hydro One submitted to the Ministry a report, "Addressing Affordability" which outlined a number of recommendations on electricity rate mitigation, including a recommendation to establish an Affordability Fund to assist struggling customers who do not qualify for low-income conservation programs.

Q. Who is eligible to benefit through the Affordability Fund and what measures will the average household receive?

Affordability Fund was established to provide energy efficiency measures to help those Ontarians not eligible for the Save on Energy Home Assistance Program, and who need support to improve the energy efficiency of their homes.

There are three levels of support available. The level each home qualifies for depends on net household income and average electricity bill. Measures offered may vary by participating electricity distributors:

- Level 1: households receive a Home Energy Kit with energy-saving products they can install themselves (e.g. LEDs, power bars, hot water pipe insulation).
- Level 2: Households may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include ENERGY STAR appliances (e.g. efficient air conditioners, refrigerators, and dehumidifiers).
- Level 3: For electrically-heated homes only, households that qualify for this level may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include insulation and/or an ENERGYSTAR heat pump.

Q. How many households are expected to benefit from the Affordability Fund?

Number of households that the \$100 million investment in the Affordability Fund will support will depend on the types of measures installed per household. Customers may be eligible to receive varying levels of support based on their total household income and average electricity bill.

As of January 12, 2018, 2,522 applications had been received by the Affordability Fund Trust, of which 1,794 have been delivered to 47 active LDCs. Eligible customers are expected to start receiving benefits through the Affordability Fund in early 2018. **Note:** Numbers are not static and should be updated (closer to Public Accounts) as they become available.

Electricity Bill Re-Design

Q. Isn't the problem the amount on people's bills, not the design?

The government recognizes that the much-needed investments in our electricity system have led to higher electricity prices. That's why the government developed Ontario's Fair Hydro Plan (OFHP) – to relieve the cost pressures caused by these system improvements.

Through the 2017 Long-Term Energy Plan (2017 LTEP) consultation process, the government heard that consumers find their current bills confusing and inaccessible, as part of 2017 LTEP, the Ministry committed to continue to work with the Ontario Energy Board (OEB), industry and consumers to explore opportunities to redesign electricity bills to make them easier for customers to understand.

Q. How can Ontario's know redesigning bills isn't just a way to hide increases?

The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills. Comparisons of costs from previous billing periods will continue to be possible.

Q. What is the overall cost of the bill redesign?

Each LDC will have different costs to implement a re-designed bill depending on current billing and customer information systems. Changes to billing systems are a part of an LDC's cost of doing business.

Q. Are all customers in Ontario getting redesigned bills, or just in some areas?

All LDCs will be required to comply with any new requirements implemented as part of a bill-redesign initiative. By March 31, 2018, all LDCs will come into compliance with the new requirement to provide customer-specific OFHP savings on invoices.

Q How do the new regulatory amendments to require that LDCs provide customer-specific savings associated with Ontario's Fair Hydro Plan on invoices fit in to the broader redesign action plan?

The requirement for dynamic messaging or customer-specific Fair Hydro savings on invoices is the first step in the broader, longer term bill re-design project. Providing customer specific savings promotes greater understanding of the associated bill impacts of Ontario's Fair Hydro Plan (OFHP) for consumers.

The new regulatory amendments are being discussed with industry stakeholders as part of the bill redesign working group.

The Ministry of Energy is continuing to work with stakeholders to examine opportunities to redesign electricity bills to make them more understandable and to give consumers the information that they want on the bill.

Q&A Response – Supplemental Questions

Q. What changes were made to the Industrial Conservation Initiative (ICI) as part of Ontario's Fair Hydro Plan?

Industrial Conservation Initiative (ICI) is a demand response program and cost allocation mechanism that was introduced in 2011 following consultation with our stakeholders.

ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours. This benefits companies financially, but it also benefits the electricity system by reducing the need for peaking generation, which reduces system costs that would otherwise need to be recovered from all Ontario ratepayers. It's a voluntary program and eligible consumers are able to opt in or out in June of each year.

As part of Ontario's Fair Hydro Plan (OFHP), ICI has been expanded to include smaller manufacturers and greenhouses with peak demand between 500 kW and 1 MW, in addition to the consumers over 1 MW who were already eligible.

- The smaller manufacturing and greenhouse consumers include those with North American Industry Classification System (NAICS) codes starting with 31-33 and 1114.
- Newly eligible participants would have begun to see the impact on their July 2017 bills.

This was in addition to an earlier regulatory amendment, effective January 2017, which had expanded the ICI to all consumers over 1 MW of average monthly peak demand.

Prior to these two expansions, there were approximately 300 ICI participants. For the current adjustment period there are approximately 1,100 participants, many of which would not have previously been eligible but realized they could benefit their companies or organizations by opting in to the program as a result of the expansions.

Q. How does the 3.357 per cent price of the Ontario Power Generation's Fair Hydro Trust's first issuance of senior notes compare with the Ministry of Energy's Fair Allocation Amount (FAA) assumptions?

A number of inputs will vary over the thirty-year life of the Global Adjustment (GA) refinancing program and will continue to be revised to reflect changing conditions (e.g., changes in interest rates).

The Ministry analysis underpinning the *2017 Fair Allocation Amount* (2017 FAA) included a 5.0 per cent average interest rate over the life of the GA refinancing program (i.e., 30 years).

- Note: Navigant's modelling of GA refinancing assumed an interest rate of 4.5 per cent. In the development of the 2017 FAA the interest rate assumptions were revised to 5 per cent based on consultations with OPG.

On February 6, 2017, OPG announced that it was able to secure an interest rate of 3.357 per cent for the senior debt on its first issuance that has a 15 year term and a value of \$500 million.

- According to the Ontario Financing Authority (OFA), this represents a spread of 23 basis points over Ontario long-term debt (per an OFA email from February 2, 2017).

On February 8, 2017, OPG advised that the remainder of the debt is split between \$382 million of "subordinated" debt at an interest rate of 3.637 per cent and \$98 million of "junior subordinated" debt at 3.957 per cent.

The effective interest rate of 3.526 per cent is the weighted average of these three series of debt (i.e., senior, subordinated and junior subordinated).

Q&A Response – Supplemental Questions

Q. What changes were made to the Industrial Conservation Initiative (ICI) as part of Ontario's Fair Hydro Plan?

Industrial Conservation Initiative (ICI) is a demand response program and cost allocation mechanism that was introduced in 2011 following consultation with our stakeholders.

ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours. This benefits companies financially, but it also benefits the electricity system by reducing the need for peaking generation, which reduces system costs that would otherwise need to be recovered from all Ontario ratepayers. It's a voluntary program and eligible consumers are able to opt in or out in June of each year.

As part of Ontario's Fair Hydro Plan (OFHP), ICI has been expanded to include smaller manufacturers and greenhouses with peak demand between 500 kW and 1 MW, in addition to the consumers over 1 MW who were already eligible.

- The smaller manufacturing and greenhouse consumers include those with North American Industry Classification System (NAICS) codes starting with 31-33 and 1114.
- Newly eligible participants would have begun to see the impact on their July 2017 bills.

This was in addition to an earlier regulatory amendment, effective January 2017, which had expanded the ICI to all consumers over 1 MW of average monthly peak demand.

Prior to these two expansions, there were approximately 300 ICI participants. For the current adjustment period there are approximately 1,100 participants, many of which would not have previously been eligible but realized they could benefit their companies or organizations by opting in to the program as a result of the expansions.

Q. How does the 3.357 per cent price of the Ontario Power Generation's Fair Hydro Trust's first issuance of senior notes compare with the Ministry of Energy's Fair Allocation Amount (FAA) assumptions?

A number of inputs will vary over the thirty-year life of the Global Adjustment (GA) refinancing program and will continue to be revised to reflect changing conditions (e.g., changes in interest rates).

The Ministry analysis underpinning the *2017 Fair Allocation Amount* (2017 FAA) included a 5.0 per cent average interest rate over the life of the GA refinancing program (i.e., 30 years).

- Note: Navigant's modelling of GA refinancing assumed an interest rate of 4.5 per cent. In the development of the 2017 FAA the interest rate assumptions were revised to 5 per cent based on consultations with OPG.

On February 6, 2017, OPG announced that it was able to secure an interest rate of 3.357 per cent for the senior debt on its first issuance that has a 15 year term and a value of \$500 million.

- According to the Ontario Financing Authority (OFA), this represents a spread of 23 basis points over Ontario long-term debt (per an OFA email from February 2, 2017).

On February 8, 2017, OPG advised that the remainder of the debt is split between \$382 million of "subordinated" debt at an interest rate of 3.637 per cent and \$98 million of "junior subordinated" debt at 3.957 per cent.

The effective interest rate of 3.526 per cent is the weighted average of these three series of debt (i.e., senior, subordinated and junior subordinated).

STANDING COMMITTEE ON PUBLIC ACCOUNTS

*Chapter 2, Public Accounts of the Province
Key Messages, Q&A Response and Issues
February 2018*

KEY MESSAGES

Ontario's Fair Hydro Plan

- The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher electricity bills.
- Ontario's Fair Hydro Plan has lowered electricity bills by 25 per cent for a typical residential consumer, and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.
- These measures include the 8 per cent rebate introduced in January 2017, which is equivalent to the provincial portion of the HST and build on previously announced initiatives to deliver broad-based rate relief on all electricity bills.
- Lower-income Ontarians and those living in eligible rural communities are receiving even greater reductions, as much as 40 to 50 per cent.
- Taken together, these changes have delivered the single largest reduction to electricity rates in Ontario's history.

Records Disclosure/Process

- The Ministry of Energy conducted a records search consistent with the 40 plus search terms provided by the Auditor General (AG).
- The Ministry selected McCarthys/Wortzmans to assist with processing and analysis of approximately 2.2 million records that resulted from the search of 81 custodians. The Ministry provided all responsive records to the AG (i.e., more than 73,000 emails).
- The Ministry provided regularly the AG with batches of responsive documents. The Ministry completed its response to the AG on October 26, 2017.

Affordability Fund / Arm's Length Trusts

- A Trust structure was selected to implement the Affordability Fund in order to provide an effective solution to distributing funds to electricity distributors. With approximately 65 distributors across Ontario, it was not feasible for the Province to enter into agreements with each distributor.
- The Trust structure establishes an independent entity with expertise from the electricity distributor and community sectors.

- In terms of governance and accountability, there are report-back requirements on the use of funds transferred as well as the ability for the government to conduct an audit to gain assurance that the funds have been used for the purposes intended.

Electricity Bill Re-Design

- Electricity bills are a customer's main window into the electricity system. Through the 2017 Long-Term Energy Plan (2017 LTEP) consultation process, the Ministry of Energy heard that customers found their bills confusing and inaccessible.
- The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills. Comparisons of costs from previous billing periods will continue to be possible.
- Hydro One has been a leader in consumer research on ways to improve the appearance and comprehension of its bill. Hydro One enlisted the services of a behavioural research firm and engaged with thousands of customers to develop a new bill design which has been observed to increase customer satisfaction and comprehension.
- Building on this research, the Ministry of Energy launched the Bill Redesign Action Plan with the aim of revising the regulatory framework on invoicing to improve the value of electricity bills for consumers. The Ministry continues to engage with industry and consumers to better understand consumer concerns and preferences with respect to the bill to ensure that any proposed changes to the bill's design will meet consumer's needs.

Q&AS RESPONSE

Ontario's Fair Hydro Plan

Q. Why did the government introduce Ontario's Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Nearly \$70 billion¹ has been invested in the electricity system since 2003, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent for a typical residential consumer and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

To address the impact of our electricity system investments on consumers, OFHP includes:

- Refinancing the Global Adjustment (GA) over a longer term period for eligible consumers, including residents, small businesses, farms and long-term care homes.
- Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill. Eligible consumers will receive additional funding through assistance programs including:
 - o Establishing a new Affordability Fund which will support Ontarians who are not eligible for the [Home Assistance Program](#) and who have difficulty paying their electricity bills.
 - o Broadening Rural or Remote Rate Protection (RRRP) to provide distribution charge relief for the customers of the local distribution companies (LDCs) with the highest distribution charges.
 - o Expanding the Ontario Electricity Support Program (OESP) to increase participation and provide further assistance to eligible participants.
 - o Establishing a new On-Reserve First Nations Delivery Rate.
- Improving sector efficiency and modernizing Ontario's electricity market, working in collaboration with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).
- Any rate increases over the next four years will be held to the rate of inflation.

In the development of Ontario's Fair Hydro Plan, the government made the policy decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity social programs, such as OESP and RRRP. At the same time, the government also made a policy decision that these new measures would be more appropriately funded from the tax-base, not the rate-base.

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

If pressed on the cost of these new and enhanced social programs:

On March 2, 2017, the government publicly announced the enhancement of the existing OESP and RRRP and the new Affordability Fund and on-reserve First Nations delivery credit. At the time, the government indicated that these new measures would cost the government up to \$2.5 billion over the next three years.

Q. Why is the government refinancing the Global Adjustment? It seems like overly complex way to provide lower electricity rates.

To reduce pressure on today's electricity consumers, a portion of Global Adjustment (GA) costs is being refinanced. In later years, the cost of financing will be recovered from consumers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that the province has made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of Ontario Fair Hydro Plan (OFHP) is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

In developing the policy to refinance the GA, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

If pressed:

Ontario's Fair Hydro Plan (OFHP) operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. You say the \$4 billion Financial Accountability Office (FAO) number is wrong? So how much will it cost?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

The \$4 billion³ figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Since a number of variables (i.e., including interest rates, electricity demand and electricity costs) will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program

Ontario Power Generation (OPG), who has been identified as the Financial Services Manager (FSM) responsible for the financing plans and the Fair Hydro Trust (i.e., the entity that will manage the debt obligations), has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

If pressed on the details of the revised peak debt number and interest costs:

Peak debt for OFHP has been revised down from March 2017, from about \$28 billion⁴ to approximately \$20 billion⁵. The higher March 2017 estimate was used by the FAO in its May 2017 report.

The estimates of total interest cost also decreased from \$25 billion⁶ to less than \$19 billion⁷.

Updated estimates are consistent with 2017 Long-Term Energy Plan (2017 LTEP) projections, and include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on FAO analysis interest costs:

The FAO's analysis of the interest cost associated with 55 per cent of debt being financed by OPG through capital markets assumed a 90 basis point spread above the rate for Government

³ Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

⁴ Ministry of Energy

⁵ Ministry of Energy

⁶ Ministry of Energy

⁷ Ministry of Energy

of Ontario debt. This is based on an average Government of Ontario interest rate assumption of 4.5 per cent and an average OPG interest rate assumption of 5.4 per cent.

As noted above, Ontario's revised analysis assumes an average interest rate for all debt of 5 per cent over the life of the plan. For reference, OPG Trust's initial offering of senior debt (comprising 51 per cent of the total offering) came in at 3.357 per cent.

Q. Why didn't you use the Ontario Electricity Financial Corporation (OEFC) to finance Ontario's Fair Hydro Plan (OFHP), similar to the Debt Retirement Charge (DRC)?

There are crucial differences between the two situations.

For example, the Ontario Electricity Financial Corporation (OEFC) stranded debt had already been incurred when the restructuring took place.

In the case of Ontario Fair Hydro Plan (OFHP), the difference between what will be collected and what will be paid to generators is considered to be an asset in accordance with the accounting definition, as it will generate a specific future revenue stream in the form of the clean energy adjustment (CEA).

It is important to note that the 1999 restructuring led to an "unbundling" of the electricity rate. Prior to the 1999 restructuring and the 2002 market opening, there was a "bundled rate" for electricity that included cost recovery of generation and transmission costs, operating and capital – including debt costs, as well as central market operations costs. Including debt cost recovery and matching the timing of the capital cost recovery with the benefit to the ratepayer is a normal rate-setting regulatory practice.

The Debt Retirement Charge (DRC) represented the unbundling of a portion of the debt service costs. It effectively amortized the cost of the investments in long-lived assets (including debt incurred).

OFHP's Global Adjustment (GA) deferral is also intended to have costs recovered from specified ratepayers over a time period that better reflects the expected lives of those assets (versus the contract lengths that may be shorter than the expected useful life of the assets).

The difference between the 1999 restructuring and OFHP is that the DRC continued to pay down, over time, debt that had already been incurred, while under OFHP, an asset is being recorded to reflect a fair allocation of electricity costs between current and future ratepayers.

The intention of OFHP is to be forward-looking, to ensure that ratepayers are sharing current and future costs, whereas the DRC was backward-looking, replacing part of a bundled rate that was already spreading the cost recovery of the debt over time.

Q. The IESO has changed how it accounts for its market books. Did the government influence this decision?

No. The Independent Electricity System Operator (IESO) chose to begin recognizing its market accounts' assets (i.e., amounts due from power distributors) and liabilities (i.e., amounts due to power producers) in its financial results. The IESO chose to recognize these markets accounts on its books for transparency reasons, as it better reflects its net financial position on behalf of the IESO-administered markets at year-end.

The government supports the enhanced reporting and greater transparency for the economic activities of IESO resulting from the recognition of the market accounts.

In addition, IESO made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model.

Both accounting changes were accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion and were highlighted in IESO's annual report which was published online in March 2017.

Q. How does the 3.357 per cent price of the Ontario Power Generation's Fair Hydro Trust's first issuance of senior notes compare with the Ministry of Energy's Fair Allocation Amount (FAA) assumptions?

A number of inputs will vary over the thirty-year life of the Global Adjustment (GA) refinancing program and will continue to be revised to reflect changing conditions (e.g., changes in interest rates).

The Ministry analysis underpinning the *2017 Fair Allocation Amount* (2017 FAA) included a 5.0 per cent average interest rate over the life of the GA refinancing program (i.e., 30 years). Note: Navigant's modelling of GA refinancing assumed an interest rate of 4.5 per cent. In the development of the 2017 FAA the interest rate assumptions were revised to 5 per cent based on consultations with OPG.

On February 6, 2017, OPG announced that it was able to secure an interest rate of 3.357 per cent for the senior debt on its first issuance that has a 15 year term and a value of \$500 million.

- According to the Ontario Financing Authority (OFA), this represents a spread of 23 basis points over Ontario long-term debt (per an OFA email from February 2, 2017).

On February 8, 2017, OPG advised that the remainder of the debt is split between \$382 million of "subordinated" debt at an interest rate of 3.637 per cent and \$98 million of "junior subordinated" debt at 3.957 per cent.

The effective interest rate of 3.526 per cent is the weighted average of these three series of debt (i.e., senior, subordinated and junior subordinated).

If pressed about future debt offerings:

OPG advises that another debt offering is planned for the near future (i.e., likely April).

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Wouldn't it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG currently manages approximately \$20 billion⁸ in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

In addition, OPG has developed solid investor relationships and has a large investor base in the structured finance space that are the target market for financing Ontario's Fair Hydro Plan (OFHP) initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors⁹, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than \$2 billion¹⁰ and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

If pressed, details of OPG's Fair Hydro Trust's first successful issuance and future activities:

On February 6, 2017, OPG announced that it was able to secure an interest rate of 3.357 per cent for the senior debt on its first issuance that has a 15 year term and a value of \$500 million.

On February 8, 2017, OPG advised that the remainder of the debt is split between \$382 million of "subordinated" debt at an interest rate of 3.637 per cent and \$98 million of "junior subordinated" debt at 3.957 per cent.

The effective interest rate of 3.526 per cent is the weighted average of these three series of debt (i.e., senior, subordinated and junior subordinated).

OPG advises that another debt offering is planned for the near future (i.e., likely April).

Q. Who was involved in the policy and implementation of refinancing the Global Adjustment?

In developing Ontario's Fair Hydro Plan (OFHP) and the policy to refinance the GA, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

⁸ Ontario Financing Authority

⁹ Ontario Power Generation

¹⁰ Ontario Power Generation

In addition, senior officials and staff from several departments and agencies, led by the Ministry of Energy, met regularly in the development of the policy and structure of OFHP.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

Ontario's Fair Hydro Plan (OFHP) operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. When do we start paying the clean energy adjustment?

In order to ensure the cost of investments in the electricity are allocated fairly amongst current and future ratepayers, a portion of Global Adjustment (GA) costs is being refinanced.

Beginning in 2021, financing costs will be recovered from consumers through the clean energy adjustment, while borrowing will continue until approximately 2028.

Q. Does OPG make money running the Fair Hydro Trust?

Ontario Power Generation was identified as the Financial Services Manager (FSM) responsible for the Financing Plans and the financing entity (i.e., Fair Hydro Trust) that will manage the debt obligations under the Global Adjustment (GA) refinancing program.

OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

Under the *Ontario Fair Hydro Plan Act, 2017* and associated regulations, OPG is permitted to charge fees in its role as FSM. This ensures OPG is able to recover costs incurred in relation to its activities as FSM. The methodology for the calculation of fees is set out in regulation and includes performance-based components. The regulation also sets out the role of the Ontario's Energy Board (OEB) in reviewing and approving the fees.

In accordance with OPG's Financing Plan, 49 per cent of the debt obligations are purchased by OPG, funded by periodic equity injections from the Province and OPG's own corporate borrowing program.

OPG earns a return on its investment in the Trust, which ensures the transactions are commercial and meets accounting requirements. The remaining 51 per cent of the debt obligations are funded through the capital markets.

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. Global Adjustment (GA) refinancing was designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. How much is the tax-base paying to keep electricity rates low? Aren't these cost that should be borne by the rate-base?

In the development of Ontario's Fair Hydro Plan, the government made the decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity support programs, such as the Ontario Electricity Support Program (OESP) and Rural or Remote Rate Protection (RRRP).

At the same time, the government also made a policy decision that cost recovery for OESP and the majority of RRRP should be shifted off electricity bills to provincial revenues. This decision has lowered regulatory charges on all electricity bills by approximately \$3/MWh.

The OESP and RRRP are programs designed to support electricity consumers that are most vulnerable to increasing electricity costs. The government's decision to fund these programs through provincial revenues was taken in recognition of the fact that these programs are for the common good and are more appropriately supported by the tax-base rather than the rate-base.

Similarly, the 8 per cent rebate introduced in January 2017, which is equivalent to the provincial portion of the HST, is also funded through provincial revenues in recognition of the social, environmental and economic goals that were achieved through the transformation of the electricity system, including the phase out of coal-fired electricity generation.

On the other hand, given that the policy objective of GA refinancing is to more fairly allocate the cost of our investments over the useful life, not the contractual term, of electricity generating assets, it was our primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the refinancing of electricity assets.

If pressed on the cost of the new and enhanced social programs and the 8 per cent rebate:

On March 2, 2017, the government publicly announced the enhancement of the existing OESP and RRRP, the new Affordability Fund, and on-reserve First Nations delivery credit. At the time, the government indicated that these new measures would cost the government up to \$2.5 billion over the next three years.

Over this same three year period, the 8 per cent rebate introduced in January 2017, which is equivalent to the provincial portion of the HST, was forecast to cost the government roughly \$1 billion dollar per year.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a clean, reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's renewable electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that renewable generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets. This is the basis for the spreading of the costs across present and future generations of rate-payers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Q. What changes were made to the Industrial Conservation Initiative (ICI) as part of Ontario's Fair Hydro Plan?

Industrial Conservation Initiative (ICI) is a demand response program and cost allocation mechanism that was introduced in 2011 following consultation with our stakeholders.

ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours. This benefits companies financially, but it also benefits the electricity system by reducing the need for peaking generation, which reduces system costs that would otherwise need to be recovered from all Ontario ratepayers. It's a voluntary program and eligible consumers are able to opt in or out in June of each year.

As part of Ontario's Fair Hydro Plan (OFHP), ICI has been expanded to include smaller manufacturers and greenhouses with peak demand between 500 kW and 1 MW, in addition to the consumers over 1 MW who were already eligible.

- The smaller manufacturing and greenhouse consumers include those with North American Industry Classification System (NAICS) codes starting with 31-33 and 1114.
- Newly eligible participants would have begun to see the impact on their July 2017 bills.

This was in addition to an earlier regulatory amendment, effective January 2017, which had expanded the ICI to all consumers over 1 MW of average monthly peak demand.

Prior to these two expansions, there were approximately 300 ICI participants. For the current adjustment period there are approximately 1,100 participants, many of which would not have

previously been eligible but realized they could benefit their companies or organizations by opting in to the program as a result of the expansions.

Records Disclosure / Process

Q. Why has the Ministry of Energy not provided all e-mails requested by the Auditor General?

The Ministry of Energy completed its response to the AG on October 26, 2017. The Ministry has provided all responsive records (more than 73,000 emails) to the AG.

Q. How much money did the Ministry spend on lawyers?

Although the retainer agreement includes a cap of up to \$500,000, the Ministry of Energy spent approximately \$150,000 on the retainer.

Q. What was the Ministry of Energy's process for providing the emails requested by the Auditor General?

The Ministry conducted a search consistent with the 40 plus search terms provided to the AG. In order to manage the approximately 2.2 million records resulted from the search of 81 custodians, the Ministry of Energy selected McCarthys/Wortzmans to assist with processing and analysis of the documents.

No legal advice on relevancy of documents was provided by Wortzmans. The Ministry completed its response to the AG on October 26, 2017.

Affordability Fund

Q. Why is there a need for an Affordability Fund?

From 2015 to early 2017, electricity distributors and other stakeholders indicated to the government that there was an immediate need to help customers struggling with their electricity bills, such as those in bill arrears and facing service disconnection.

Electricity distributors reported to the Ontario Energy Board (OEB) that around 56,500 customers were disconnected in 2015 and over 58,000 customers were disconnected in 2016. Electricity distributors also reported about 400,000 residential electricity accounts in arrears in 2016.

In January 2017, Hydro One submitted to the Ministry a report, "Addressing Affordability" which outlined a number of recommendations on electricity rate mitigation, including a recommendation to establish an Affordability Fund to assist struggling customers who do not qualify for low-income conservation programs.

Q. Who is eligible to benefit through the Affordability Fund and what measures will the average household receive?

Affordability Fund was established to provide energy efficiency measures to help those Ontarians not eligible for the Save on Energy Home Assistance Program, and who need support to improve the energy efficiency of their homes.

There are three levels of support available. The level each home qualifies for depends on net household income and average electricity bill. Measures offered may vary by participating electricity distributors:

- Level 1: households receive a Home Energy Kit with energy-saving products they can install themselves (e.g. LEDs, power bars, hot water pipe insulation).
- Level 2: Households may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include ENERGY STAR appliances (e.g. efficient air conditioners, refrigerators, and dehumidifiers).
- Level 3: For electrically-heated homes only, households that qualify for this level may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include insulation and/or an ENERGYSTAR heat pump.

Q. How many households are expected to benefit from the Affordability Fund?

Number of households that the \$100 million investment in the Affordability Fund will support will depend on the types of measures installed per household. Customers may be eligible to receive varying levels of support based on their total household income and average electricity bill.

As of January 12, 2018, 2,522 applications had been received by the Affordability Fund Trust, of which 1,794 have been delivered to 47 active LDCs. Eligible customers are expected to start receiving benefits through the Affordability Fund in early 2018. **Note:** Numbers are not static and should be updated (closer to Public Accounts) as they become available.

Electricity Bill Re-Design

Q. Isn't the problem the amount on people's bills, not the design?

The government recognizes that the much-needed investments in our electricity system have led to higher electricity prices. That's why the government developed Ontario's Fair Hydro Plan (OFHP) – to relieve the cost pressures caused by these system improvements.

Through the 2017 Long-Term Energy Plan (2017 LTEP) consultation process, the government heard that consumers find their current bills confusing and inaccessible, as part of 2017 LTEP, the Ministry committed to continue to work with the Ontario Energy Board (OEB), industry and consumers to explore opportunities to redesign electricity bills to make them easier for customers to understand.

Q. How can Ontarian's know redesigning bills isn't just a way to hide increases?

The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills. Comparisons of costs from previous billing periods will continue to be possible.

Q. What is the overall cost of the bill redesign?

Each LDC will have different costs to implement a re-designed bill depending on current billing and customer information systems. Changes to billing systems are a part of an LDC's cost of doing business.

Q. Are all customers in Ontario getting redesigned bills, or just in some areas?

All LDCs will be required to comply with any new requirements implemented as part of a bill-redesign initiative. By March 31, 2018, all LDCs will come into compliance with the new requirement to provide customer-specific OFHP savings on invoices.

Q How do the new regulatory amendments to require that LDCs provide customer-specific savings associated with Ontario's Fair Hydro Plan on invoices fit in to the broader redesign action plan?

The requirement for dynamic messaging or customer-specific Fair Hydro savings on invoices is the first step in the broader, longer term bill re-design project. Providing customer specific savings promotes greater understanding of the associated bill impacts of Ontario's Fair Hydro Plan (OFHP) for consumers.

The new regulatory amendments are being discussed with industry stakeholders as part of the bill redesign working group.

The Ministry of Energy is continuing to work with stakeholders to examine opportunities to redesign electricity bills to make them more understandable and to give consumers the information that they want on the bill.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

*Chapter 2, Public Accounts of the Province
Key Messages, Q&A Response and Issues
February 2018*

KEY MESSAGES

Ontario's Fair Hydro Plan

- The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher electricity bills.
- Ontario's Fair Hydro Plan has lowered electricity bills by 25 per cent for a typical residential consumer, and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.
- These measures include the 8 per cent rebate introduced in January 2017, which is equivalent to the provincial portion of the HST and build on previously announced initiatives to deliver broad-based rate relief on all electricity bills.
- Lower-income Ontarians and those living in eligible rural communities are receiving even greater reductions, as much as 40 to 50 per cent.
- Taken together, these changes have delivered the single largest reduction to electricity rates in Ontario's history.

Records Disclosure/Process

- The Ministry of Energy conducted a records search consistent with the 40 plus search terms provided by the Auditor General (AG).
- The Ministry selected McCarthys/Wortzmans to assist with processing and analysis of approximately 2.2 million records that resulted from the search of 81 custodians. The Ministry provided all responsive records to the AG (i.e., more than 73,000 emails).
- The Ministry provided regularly the AG with batches of responsive documents. The Ministry completed its response to the AG on October 26, 2017.

Affordability Fund / Arm's Length Trusts

- A Trust structure was selected to implement the Affordability Fund in order to provide an effective solution to distributing funds to electricity distributors. With approximately 65 distributors across Ontario, it was not feasible for the Province to enter into agreements with each distributor.
- The Trust structure establishes an independent entity with expertise from the electricity distributor and community sectors.

- In terms of governance and accountability, there are report-back requirements on the use of funds transferred as well as the ability for the government to conduct an audit to gain assurance that the funds have been used for the purposes intended.

Electricity Bill Re-Design

- Electricity bills are a customer's main window into the electricity system. Through the 2017 Long-Term Energy Plan (2017 LTEP) consultation process, the Ministry of Energy heard that customers found their bills confusing and inaccessible.
- The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills. Comparisons of costs from previous billing periods will continue to be possible.
- Hydro One has been a leader in consumer research on ways to improve the appearance and comprehension of its bill. Hydro One enlisted the services of a behavioural research firm and engaged with thousands of customers to develop a new bill design which has been observed to increase customer satisfaction and comprehension.
- Building on this research, the Ministry of Energy launched the Bill Redesign Action Plan with the aim of revising the regulatory framework on invoicing to improve the value of electricity bills for consumers. The Ministry continues to engage with industry and consumers to better understand consumer concerns and preferences with respect to the bill to ensure that any proposed changes to the bill's design will meet consumer's needs.

Q&AS RESPONSE

Ontario's Fair Hydro Plan

Q. Why did the government introduce Ontario's Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Nearly \$70 billion¹ has been invested in the electricity system since 2003, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent for a typical residential consumer and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

To address the impact of our electricity system investments on consumers, OFHP includes:

- Refinancing the Global Adjustment (GA) over a longer term period for eligible consumers, including residents, small businesses, farms and long-term care homes.
- Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill. Eligible consumers will receive additional funding through assistance programs including:
 - o Establishing a new Affordability Fund which will support Ontarians who are not eligible for the [Home Assistance Program](#) and who have difficulty paying their electricity bills.
 - o Broadening Rural or Remote Rate Protection (RRRP) to provide distribution charge relief for the customers of the local distribution companies (LDCs) with the highest distribution charges.
 - o Expanding the Ontario Electricity Support Program (OESP) to increase participation and provide further assistance to eligible participants.
 - o Establishing a new On-Reserve First Nations Delivery Rate.
- Improving sector efficiency and modernizing Ontario's electricity market, working in collaboration with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).
- Any rate increases over the next four years will be held to the rate of inflation.

In the development of Ontario's Fair Hydro Plan, the government made the policy decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity social programs, such as OESP and RRRP. At the same time, the government also made a policy decision that these new measures would be more appropriately funded from the tax-base, not the rate-base.

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

If pressed on the cost of these new and enhanced social programs:

On March 2, 2017, the government publicly announced the enhancement of the existing OESP and RRRP and the new Affordability Fund and on-reserve First Nations delivery credit. At the time, the government indicated that these new measures would cost the government up to \$2.5 billion over the next three years.

Q. Why is the government refinancing the Global Adjustment? It seems like overly complex way to provide lower electricity rates.

To reduce pressure on today's electricity consumers, a portion of Global Adjustment (GA) costs is being refinanced. In later years, the cost of financing will be recovered from consumers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that the province has made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of Ontario Fair Hydro Plan (OFHP) is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

In developing the policy to refinance the GA, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

If pressed:

Ontario's Fair Hydro Plan (OFHP) operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. You say the \$4 billion Financial Accountability Office (FAO) number is wrong? So how much will it cost?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

The \$4 billion³ figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Since a number of variables (i.e., including interest rates, electricity demand and electricity costs) will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program

Ontario Power Generation (OPG), who has been identified as the Financial Services Manager (FSM) responsible for the financing plans and the Fair Hydro Trust (i.e., the entity that will manage the debt obligations), has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

If pressed on the details of the revised peak debt number and interest costs:

Peak debt for OFHP has been revised down from March 2017, from about \$ 28 billion⁴ to approximately \$20 billion⁵. The higher March 2017 estimate was used by the FAO in its May 2017 report.

The estimates of total interest cost also decreased from \$25 billion⁶ to less than \$19 billion⁷.

Updated estimates are consistent with 2017 Long-Term Energy Plan (2017 LTEP) projections, and include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

³ Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

⁴ Ministry of Energy

⁵ Ministry of Energy

⁶ Ministry of Energy

⁷ Ministry of Energy

Q. How does the 3.357 per cent price of the Ontario Power Generation's Fair Hydro Trust's first issuance of senior notes compare with the Ministry of Energy's Fair Allocation Amount (FAA) assumptions?

A number of inputs will vary over the thirty-year life of the Global Adjustment (GA) refinancing program and will continue to be revised to reflect changing conditions (e.g., changes in interest rates).

The Ministry analysis underpinning the *2017 Fair Allocation Amount* (2017 FAA) included a 5.0 per cent average interest rate over the life of the GA refinancing program (i.e., 30 years). Note: Navigant's modelling of GA refinancing assumed an interest rate of 4.5 per cent. In the development of the 2017 FAA the interest rate assumptions were revised to 5 per cent based on consultations with OPG.

On February 6, 2017, OPG announced that it was able to secure an interest rate of 3.357 per cent for the senior debt on its first issuance that has a 15 year term and a value of \$500 million.

On February 8, 2017, OPG advised that the remainder of the debt is split between \$382 million of "subordinated" debt at an interest rate of 3.637 per cent and \$98 million of "junior subordinated" debt at 3.957 per cent.

The effective interest rate of 3.526 per cent is the weighted average of these three series of debt (i.e., senior, subordinated and junior subordinated).

If pressed about future debt offerings:

OPG advises that another debt offering is planned for the near future (i.e., likely April).

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Wouldn't it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG currently manages approximately \$20 billion⁸ in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

In addition, OPG has developed solid investor relationships and has a large investor base in the structured finance space that are the target market for financing Ontario's Fair Hydro Plan

⁸ Ontario Financing Authority

(OFHP) initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors⁹, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than \$2 billion¹⁰ and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

If pressed, details of OPG's Fair Hydro Trust's first successful issuance and future activities:

On February 6, 2017, OPG announced that it was able to secure an interest rate of 3.357 per cent for the senior debt on its first issuance that has a 15 year term and a value of \$500 million.

On February 8, 2017, OPG advised that the remainder of the debt is split between \$382 million of "subordinated" debt at an interest rate of 3.637 per cent and \$98 million of "junior subordinated" debt at 3.957 per cent.

The effective interest rate of 3.526 per cent is the weighted average of these three series of debt (i.e., senior, subordinated and junior subordinated).

OPG advises that another debt offering is planned for the near future (i.e., likely April).

Q. Who was involved in the policy and implementation of refinancing the Global Adjustment?

In developing Ontario's Fair Hydro Plan (OFHP) and the policy to refinance the GA, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

In addition, senior officials and staff from several departments and agencies, led by the Ministry of Energy, met regularly in the development of the policy and structure of OFHP.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

⁹ Ontario Power Generation

¹⁰ Ontario Power Generation

Ontario's Fair Hydro Plan (OFHP) operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. When do we start paying the clean energy adjustment?

In order to ensure the cost of investments in the electricity are allocated fairly amongst current and future ratepayers, a portion of Global Adjustment (GA) costs is being refinanced.

Beginning in 2021, financing costs will be recovered from consumers through the clean energy adjustment, while borrowing will continue until approximately 2028.

Q. Does OPG make money running the Fair Hydro Trust?

Ontario Power Generation was identified as the Financial Services Manager (FSM) responsible for the Financing Plans and the financing entity (i.e., Fair Hydro Trust) that will manage the debt obligations under the Global Adjustment (GA) refinancing program.

OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

Under the *Ontario Fair Hydro Plan Act, 2017* and associated regulations, OPG is permitted to charge fees in its role as FSM. This ensures OPG is able to recover costs incurred in relation to its activities as FSM. The methodology for the calculation of fees is set out in regulation and includes performance-based components. The regulation also sets out the role of the Ontario's Energy Board (OEB) in reviewing and approving the fees.

In accordance with OPG's Financing Plan, 49 per cent of the debt obligations are purchased by OPG, funded by periodic equity injections from the Province and OPG's own corporate borrowing program.

OPG earns a return on its investment in the Trust, which ensures the transactions are commercial and meets accounting requirements. The remaining 51 per cent of the debt obligations are funded through the capital markets.

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. Global Adjustment (GA) refinancing was designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. How much is the tax-base paying to keep electricity rates low? Aren't these cost that should be borne by the rate-base?

In the development of Ontario's Fair Hydro Plan, the government made the decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity support programs, such as the Ontario Electricity Support Program (OESP) and Rural or Remote Rate Protection (RRRP).

At the same time, the government also made a policy decision that cost recovery for OESP and the majority of RRRP should be shifted off electricity bills to provincial revenues. This decision has lowered regulatory charges on all electricity bills by approximately \$3/MWh.

The OESP and RRRP are programs designed to support electricity consumers that are most vulnerable to increasing electricity costs. The government's decision to fund these programs through provincial revenues was taken in recognition of the fact that these programs are for the common good and are more appropriately supported by the tax-base rather than the rate-base.

Similarly, the 8 per cent rebate introduced in January 2017, which is equivalent to the provincial portion of the HST, is also funded through provincial revenues in recognition of the social, environmental and economic goals that were achieved through the transformation of the electricity system, including the phase out of coal-fired electricity generation.

On the other hand, given that the policy objective of GA refinancing is to more fairly allocate the cost of our investments over the useful life, not the contractual term, of electricity generating assets, it was our primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the refinancing of electricity assets.

If pressed on the cost of the new and enhanced social programs and the 8 per cent rebate:

On March 2, 2017, the government publicly announced the enhancement of the existing OESP and RRRP, the new Affordability Fund, and on-reserve First Nations delivery credit. At the time, the government indicated that these new measures would cost the government up to \$2.5 billion over the next three years.

Over this same three year period, the 8 per cent rebate introduced in January 2017, which is equivalent to the provincial portion of the HST, was forecast to cost the government roughly \$1 billion dollar per year.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a clean, reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's renewable electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that renewable generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets. This is the basis for the spreading of the costs across present and future generations of rate-payers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Records Disclosure / Process

Q. Why has the Ministry of Energy not provided all e-mails requested by the Auditor General?

The Ministry of Energy completed its response to the AG on October 26, 2017. The Ministry has provided all responsive records (more than 73,000 emails) to the AG.

Q. How much money did the Ministry spend on lawyers?

Although the retainer agreement includes a cap of up to \$500,000, the Ministry of Energy spent approximately \$150,000 on the retainer.

Q. What was the Ministry of Energy's process for providing the emails requested by the Auditor General?

The Ministry conducted a search consistent with the 40 plus search terms provided to the AG. In order to manage the approximately 2.2 million records resulted from the search of 81 custodians, the Ministry of Energy selected McCarthys/Wortzmans to assist with processing and analysis of the documents.

No legal advice on relevancy of documents was provided by Wortzmans. The Ministry completed its response to the AG on October 26, 2017.

Affordability Fund

Q. Why is there a need for an Affordability Fund?

From 2015 to early 2017, electricity distributors and other stakeholders indicated to the government that there was an immediate need to help customers struggling with their electricity bills, such as those in bill arrears and facing service disconnection.

Electricity distributors reported to the Ontario Energy Board (OEB) that around 56,500 customers were disconnected in 2015 and over 58,000 customers were disconnected in 2016. Electricity distributors also reported about 400,000 residential electricity accounts in arrears in 2016.

In January 2017, Hydro One submitted to the Ministry a report, “Addressing Affordability” which outlined a number of recommendations on electricity rate mitigation, including a recommendation to establish an Affordability Fund to assist struggling customers who do not qualify for low-income conservation programs.

Q. Who is eligible to benefit through the Affordability Fund and what measures will the average household receive?

Affordability Fund was established to provide energy efficiency measures to help those Ontarians not eligible for the Save on Energy Home Assistance Program, and who need support to improve the energy efficiency of their homes.

There are three levels of support available. The level each home qualifies for depends on net household income and average electricity bill. Measures offered may vary by participating electricity distributors:

- Level 1: households receive a Home Energy Kit with energy-saving products they can install themselves (e.g. LEDs, power bars, hot water pipe insulation).
- Level 2: Households may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include ENERGY STAR appliances (e.g. efficient air conditioners, refrigerators, and dehumidifiers).
- Level 3: For electrically-heated homes only, households that qualify for this level may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include insulation and/or an ENERGYSTAR heat pump.

Q. How many households are expected to benefit from the Affordability Fund?

Number of households that the \$100 million investment in the Affordability Fund will support will depend on the types of measures installed per household. Customers may be eligible to receive varying levels of support based on their total household income and average electricity bill.

As of January 12, 2018, 2,522 applications had been received by the Affordability Fund Trust, of which 1,794 have been delivered to 47 active LDCs. Eligible customers are expected to start receiving benefits through the Affordability Fund in early 2018. **Note:** Numbers are not static and should be updated (closer to Public Accounts) as they become available.

Electricity Bill Re-Design

Q. Isn't the problem the amount on people's bills, not the design?

The government recognizes that the much-needed investments in our electricity system have led to higher electricity prices. That's why the government developed Ontario's Fair Hydro Plan (OFHP) – to relieve the cost pressures caused by these system improvements.

Through the 2017 Long-Term Energy Plan (2017 LTEP) consultation process, the government heard that consumers find their current bills confusing and inaccessible, as part of 2017 LTEP, the Ministry committed to continue to work with the Ontario Energy Board (OEB), industry and

consumers to explore opportunities to redesign electricity bills to make them easier for customers to understand.

Q. How can Ontarian's know redesigning bills isn't just a way to hide increases?

The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills. Comparisons of costs from previous billing periods will continue to be possible.

Q. What is the overall cost of the bill redesign?

Each LDC will have different costs to implement a re-designed bill depending on current billing and customer information systems. Changes to billing systems are a part of an LDC's cost of doing business.

Q. Are all customers in Ontario getting redesigned bills, or just in some areas?

All LDCs will be required to comply with any new requirements implemented as part of a bill-redesign initiative. By March 31, 2018, all LDCs will come into compliance with the new requirement to provide customer-specific OFHP savings on invoices.

Q How do the new regulatory amendments to require that LDCs provide customer-specific savings associated with Ontario's Fair Hydro Plan on invoices fit in to the broader redesign action plan?

The requirement for dynamic messaging or customer-specific Fair Hydro savings on invoices is the first step in the broader, longer term bill re-design project. Providing customer specific savings promotes greater understanding of the associated bill impacts of Ontario's Fair Hydro Plan (OFHP) for consumers.

The new regulatory amendments are being discussed with industry stakeholders as part of the bill redesign working group.

The Ministry of Energy is continuing to work with stakeholders to examine opportunities to redesign electricity bills to make them more understandable and to give consumers the information that they want on the bill.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

*Chapter 2, Public Accounts of the Province
Key Messages, Q&A Response and Issues
February 2018*

KEY MESSAGES

Ontario's Fair Hydro Plan

- The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher electricity bills.
- Ontario's Fair Hydro Plan has lowered electricity bills by 25 per cent for a typical residential consumer, and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.
- These measures include the 8 per cent rebate introduced in January 2017, which is equivalent to the provincial portion of the HST and build on previously announced initiatives to deliver broad-based rate relief on all electricity bills.
- Lower-income Ontarians and those living in eligible rural communities are receiving even greater reductions, as much as 40 to 50 per cent.
- Taken together, these changes have delivered the single largest reduction to electricity rates in Ontario's history.

Records Disclosure/Process

- The Ministry of Energy conducted a records search consistent with the 40 plus search terms provided by the Auditor General (AG).
- The Ministry selected McCarthys/Wortzmans to assist with processing and analysis of approximately 2.2 million records that resulted from the search of 81 custodians. The Ministry provided all responsive records to the AG (i.e., more than 73,000 emails).
- The Ministry provided regularly the AG with batches of responsive documents. The Ministry completed its response to the AG on October 26, 2017.

Affordability Fund / Arm's Length Trusts

- A Trust structure was selected to implement the Affordability Fund in order to provide an effective solution to distributing funds to electricity distributors. With approximately 65 distributors across Ontario, it was not feasible for the Province to enter into agreements with each distributor.
- The Trust structure establishes an independent entity with expertise from the electricity distributor and community sectors.

- In terms of governance and accountability, there are report-back requirements on the use of funds transferred as well as the ability for the government to conduct an audit to gain assurance that the funds have been used for the purposes intended.

Electricity Bill Re-Design

- Electricity bills are a customer's main window into the electricity system. Through the 2017 Long-Term Energy Plan (2017 LTEP) consultation process, the Ministry of Energy heard that customers found their bills confusing and inaccessible.
- The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills. Comparisons of costs from previous billing periods will continue to be possible.
- Hydro One has been a leader in consumer research on ways to improve the appearance and comprehension of its bill. Hydro One enlisted the services of a behavioural research firm and engaged with thousands of customers to develop a new bill design which has been observed to increase customer satisfaction and comprehension.
- Building on this research, the Ministry of Energy launched the Bill Redesign Action Plan with the aim of revising the regulatory framework on invoicing to improve the value of electricity bills for consumers. The Ministry continues to engage with industry and consumers to better understand consumer concerns and preferences with respect to the bill to ensure that any proposed changes to the bill's design will meet consumer's needs.

Q&AS RESPONSE

Ontario's Fair Hydro Plan

Q. Why did the government introduce Ontario's Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Nearly \$70 billion¹ has been invested in the electricity system since 2003, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent for a typical residential consumer and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

To address the impact of our electricity system investments on consumers, OFHP includes:

- Refinancing the Global Adjustment (GA) over a longer term period for eligible consumers, including residents, small businesses, farms and long-term care homes.
- Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill. Eligible consumers will receive additional funding through assistance programs including:
 - o Establishing a new Affordability Fund which will support Ontarians who are not eligible for the [Home Assistance Program](#) and who have difficulty paying their electricity bills.
 - o Broadening Rural or Remote Rate Protection (RRRP) to provide distribution charge relief for the customers of the local distribution companies (LDCs) with the highest distribution charges.
 - o Expanding the Ontario Electricity Support Program (OESP) to increase participation and provide further assistance to eligible participants.
 - o Establishing a new On-Reserve First Nations Delivery Rate.
- Improving sector efficiency and modernizing Ontario's electricity market, working in collaboration with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).
- Any rate increases over the next four years will be held to the rate of inflation.

In the development of Ontario's Fair Hydro Plan, the government made the policy decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity social programs, such as OESP and RRRP. At the same time, the government also made a policy decision that these new measures would be more appropriately funded from the tax-base, not the rate-base.

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

If pressed on the cost of these new and enhanced social programs:

On March 2, 2017, the government publicly announced the enhancement of the existing OESP and RRRP and the new Affordability Fund and on-reserve First Nations delivery credit. At the time, the government indicated that these new measures would cost the government up to \$2.5 billion over the next three years.

Q. Why is the government refinancing the Global Adjustment? It seems like overly complex way to provide lower electricity rates.

To reduce pressure on today's electricity consumers, a portion of Global Adjustment (GA) costs is being refinanced. In later years, the cost of financing will be recovered from consumers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that the province has made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of Ontario Fair Hydro Plan (OFHP) is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

In developing the policy to refinance the GA, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

If pressed:

Ontario's Fair Hydro Plan (OFHP) operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. You say the \$4 billion Financial Accountability Office (FAO) number is wrong? So how much will it cost?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

The \$4 billion³ figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Since a number of variables (i.e., including interest rates, electricity demand and electricity costs) will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program

Ontario Power Generation (OPG), who has been identified as the Financial Services Manager (FSM) responsible for the financing plans and the Fair Hydro Trust (i.e., the entity that will manage the debt obligations), has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

If pressed on the details of the revised peak debt number and interest costs:

Peak debt for OFHP has been revised down from March 2017, from about \$ 28 billion⁴ to approximately \$20 billion⁵. The higher March 2017 estimate was used by the FAO in its May 2017 report.

The estimates of total interest cost also decreased from \$25 billion⁶ to less than \$19 billion⁷.

Updated estimates are consistent with 2017 Long-Term Energy Plan (2017 LTEP) projections, and include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

Q. Why didn't you use the OEFC to do the borrowing?

Q. The IESO has changed how it accounts for its market books. Did the government influence this decision?

³ Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

⁴ Ministry of Energy

⁵ Ministry of Energy

⁶ Ministry of Energy

⁷ Ministry of Energy

Commented [HS(1)]: Can we also include a paragraph that talks about the "spread" assumptions that the FAO used and what we used in initial modeling

Commented [HS(2)]: Can we add this in. DM remembers an old Q&A package that we did on this topic.

The Q&A talked about OEFC was set-up to deal with the stranded debt.

Commented [HS(3)]: In the TBS's Q&A package I recall there being Q&A that explains why IESO chose to change its accounting.

Include that content.

Q. How does the 3.357 per cent price of the Ontario Power Generation's Fair Hydro Trust's first issuance of senior notes compare with the Ministry of Energy's Fair Allocation Amount (FAA) assumptions?

A number of inputs will vary over the thirty-year life of the Global Adjustment (GA) refinancing program and will continue to be revised to reflect changing conditions (e.g., changes in interest rates).

The Ministry analysis underpinning the *2017 Fair Allocation Amount* (2017 FAA) included a 5.0 per cent average interest rate over the life of the GA refinancing program (i.e., 30 years). Note: Navigant's modelling of GA refinancing assumed an interest rate of 4.5 per cent. In the development of the 2017 FAA the interest rate assumptions were revised to 5 per cent based on consultations with OPG.

On February 6, 2017, OPG announced that it was able to secure an interest rate of 3.357 per cent for the senior debt on its first issuance that has a 15 year term and a value of \$500 million.

On February 8, 2017, OPG advised that the remainder of the debt is split between \$382 million of "subordinated" debt at an interest rate of 3.637 per cent and \$98 million of "junior subordinated" debt at 3.957 per cent.

The effective interest rate of 3.526 per cent is the weighted average of these three series of debt (i.e., senior, subordinated and junior subordinated).

If pressed about future debt offerings:

OPG advises that another debt offering is planned for the near future (i.e., likely April).

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Wouldn't it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG currently manages approximately \$20 billion⁸ in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

⁸ Ontario Financing Authority

In addition, OPG has developed solid investor relationships and has a large investor base in the structured finance space that are the target market for financing Ontario's Fair Hydro Plan (OFHP) initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors⁹, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than \$2 billion¹⁰ and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

If pressed, details of OPG's Fair Hydro Trust's first successful issuance and future activities:

On February 6, 2017, OPG announced that it was able to secure an interest rate of 3.357 per cent for the senior debt on its first issuance that has a 15 year term and a value of \$500 million.

On February 8, 2017, OPG advised that the remainder of the debt is split between \$382 million of "subordinated" debt at an interest rate of 3.637 per cent and \$98 million of "junior subordinated" debt at 3.957 per cent.

The effective interest rate of 3.526 per cent is the weighted average of these three series of debt (i.e., senior, subordinated and junior subordinated).

OPG advises that another debt offering is planned for the near future (i.e., likely April).

Q. Who was involved in the policy and implementation of refinancing the Global Adjustment?

In developing Ontario's Fair Hydro Plan (OFHP) and the policy to refinance the GA, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

In addition, senior officials and staff from several departments and agencies, led by the Ministry of Energy, met regularly in the development of the policy and structure of OFHP.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

⁹ Ontario Power Generation

¹⁰ Ontario Power Generation

Ontario's Fair Hydro Plan (OFHP) operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. When do we start paying the clean energy adjustment?

In order to ensure the cost of investments in the electricity are allocated fairly amongst current and future ratepayers, a portion of Global Adjustment (GA) costs is being refinanced.

Beginning in 2021, financing costs will be recovered from consumers through the clean energy adjustment, while borrowing will continue until approximately 2028.

Q. Does OPG make money running the Fair Hydro Trust?

Ontario Power Generation was identified as the Financial Services Manager (FSM) responsible for the Financing Plans and the financing entity (i.e., Fair Hydro Trust) that will manage the debt obligations under the Global Adjustment (GA) refinancing program.

OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

Under the *Ontario Fair Hydro Plan Act, 2017* and associated regulations, OPG is permitted to charge fees in its role as FSM. This ensures OPG is able to recover costs incurred in relation to its activities as FSM. The methodology for the calculation of fees is set out in regulation and includes performance-based components. The regulation also sets out the role of the Ontario's Energy Board (OEB) in reviewing and approving the fees.

In accordance with OPG's Financing Plan, 49 per cent of the debt obligations are purchased by OPG, funded by periodic equity injections from the Province and OPG's own corporate borrowing program.

OPG earns a return on its investment in the Trust, which ensures the transactions are commercial and meets accounting requirements. The remaining 51 per cent of the debt obligations are funded through the capital markets.

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. Global Adjustment (GA) refinancing was designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. How much is the tax-base paying to keep electricity rates low? Aren't these cost that should be borne by the rate-base?

In the development of Ontario's Fair Hydro Plan, the government made the decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity support programs, such as the Ontario Electricity Support Program (OESP) and Rural or Remote Rate Protection (RRRP).

At the same time, the government also made a policy decision that cost recovery for OESP and the majority of RRRP should be shifted off electricity bills to provincial revenues. This decision has lowered regulatory charges on all electricity bills by approximately \$3/MWh.

The OESP and RRRP are programs designed to support electricity consumers that are most vulnerable to increasing electricity costs. The government's decision to fund these programs through provincial revenues was taken in recognition of the fact that these programs are for the common good and are more appropriately supported by the tax-base rather than the rate-base.

Similarly, the 8 per cent rebate introduced in January 2017, which is equivalent to the provincial portion of the HST, is also funded through provincial revenues in recognition of the social, environmental and economic goals that were achieved through the transformation of the electricity system, including the phase out of coal-fired electricity generation.

On the other hand, given that the policy objective of GA refinancing is to more fairly allocate the cost of our investments over the useful life, not the contractual term, of electricity generating assets, it was our primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the refinancing of electricity assets.

If pressed on the cost of the new and enhanced social programs and the 8 per cent rebate:

On March 2, 2017, the government publicly announced the enhancement of the existing OESP and RRRP, the new Affordability Fund, and on-reserve First Nations delivery credit. At the time, the government indicated that these new measures would cost the government up to \$2.5 billion over the next three years.

Over this same three year period, the 8 per cent rebate introduced in January 2017, which is equivalent to the provincial portion of the HST, was forecast to cost the government roughly \$1 billion dollar per year.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a clean, reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's renewable electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that renewable generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets. This is the basis for the spreading of the costs across present and future generations of rate-payers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Records Disclosure / Process

Q. Why has the Ministry of Energy not provided all e-mails requested by the Auditor General?

The Ministry of Energy completed its response to the AG on October 26, 2017. The Ministry has provided all responsive records (more than 73,000 emails) to the AG.

Q. How much money did the Ministry spend on lawyers?

Although the retainer agreement includes a cap of up to \$500,000, the Ministry of Energy spent approximately \$150,000 on the retainer.

Q. What was the Ministry of Energy's process for providing the emails requested by the Auditor General?

The Ministry conducted a search consistent with the 40 plus search terms provided to the AG. In order to manage the approximately 2.2 million records resulted from the search of 81 custodians, the Ministry of Energy selected McCarthy/Wortzmans to assist with processing and analysis of the documents.

No legal advice on relevancy of documents was provided by Wortzmans. The Ministry completed its response to the AG on October 26, 2017.

Affordability Fund

Q. Why is there a need for an Affordability Fund?

From 2015 to early 2017, electricity distributors and other stakeholders indicated to the government that there was an immediate need to help customers struggling with their electricity bills, such as those in bill arrears and facing service disconnection.

Electricity distributors reported to the Ontario Energy Board (OEB) that around 56,500 customers were disconnected in 2015 and over 58,000 customers were disconnected in 2016. Electricity distributors also reported about 400,000 residential electricity accounts in arrears in 2016.

In January 2017, Hydro One submitted to the Ministry a report, "Addressing Affordability" which outlined a number of recommendations on electricity rate mitigation, including a recommendation to establish an Affordability Fund to assist struggling customers who do not qualify for low-income conservation programs.

Q. Who is eligible to benefit through the Affordability Fund and what measures will the average household receive?

Affordability Fund was established to provide energy efficiency measures to help those Ontarians not eligible for the Save on Energy Home Assistance Program, and who need support to improve the energy efficiency of their homes.

There are three levels of support available. The level each home qualifies for depends on net household income and average electricity bill. Measures offered may vary by participating electricity distributors:

- Level 1: households receive a Home Energy Kit with energy-saving products they can install themselves (e.g. LEDs, power bars, hot water pipe insulation).
- Level 2: Households may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include ENERGY STAR appliances (e.g. efficient air conditioners, refrigerators, and dehumidifiers).
- Level 3: For electrically-heated homes only, households that qualify for this level may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include insulation and/or an ENERGYSTAR heat pump.

Q. How many households are expected to benefit from the Affordability Fund?

Number of households that the \$100 million investment in the Affordability Fund will support will depend on the types of measures installed per household. Customers may be eligible to receive varying levels of support based on their total household income and average electricity bill.

As of January 12, 2018, 2,522 applications had been received by the Affordability Fund Trust, of which 1,794 have been delivered to 47 active LDCs. Eligible customers are expected to start receiving benefits through the Affordability Fund in early 2018. **Note:** Numbers are not static and should be updated (closer to Public Accounts) as they become available.

Electricity Bill Re-Design

Q. Isn't the problem the amount on people's bills, not the design?

The government recognizes that the much-needed investments in our electricity system have led to higher electricity prices. That's why the government developed Ontario's Fair Hydro Plan (OFHP) – to relieve the cost pressures caused by these system improvements.

Through the 2017 Long-Term Energy Plan (2017 LTEP) consultation process, the government heard that consumers find their current bills confusing and inaccessible, as part of 2017 LTEP, the Ministry committed to continue to work with the Ontario Energy Board (OEB), industry and

consumers to explore opportunities to redesign electricity bills to make them easier for customers to understand.

Q. How can Ontario's know redesigning bills isn't just a way to hide increases?

The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills. Comparisons of costs from previous billing periods will continue to be possible.

Q. What is the overall cost of the bill redesign?

Each LDC will have different costs to implement a re-designed bill depending on current billing and customer information systems. Changes to billing systems are a part of an LDC's cost of doing business.

Q. Are all customers in Ontario getting redesigned bills, or just in some areas?

All LDCs will be required to comply with any new requirements implemented as part of a bill-redesign initiative. By March 31, 2018, all LDCs will come into compliance with the new requirement to provide customer-specific OFHP savings on invoices.

Q How do the new regulatory amendments to require that LDCs provide customer-specific savings associated with Ontario's Fair Hydro Plan on invoices fit in to the broader redesign action plan?

The requirement for dynamic messaging or customer-specific Fair Hydro savings on invoices is the first step in the broader, longer term bill re-design project. Providing customer specific savings promotes greater understanding of the associated bill impacts of Ontario's Fair Hydro Plan (OFHP) for consumers.

The new regulatory amendments are being discussed with industry stakeholders as part of the bill redesign working group.

The Ministry of Energy is continuing to work with stakeholders to examine opportunities to redesign electricity bills to make them more understandable and to give consumers the information that they want on the bill.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

*Chapter 2, Public Accounts of the Province
Key Messages, Q&A Response and Issues
February 2018*

KEY MESSAGES

Ontario's Fair Hydro Plan

- The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher electricity bills.
- Ontario's Fair Hydro Plan has lowered electricity bills by 25 per cent for a typical residential consumer, and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.
- These measures include the 8 per cent rebate introduced in January 2017, which is equivalent to the provincial portion of the HST and build on previously announced initiatives to deliver broad-based rate relief on all electricity bills.
- Lower-income Ontarians and those living in eligible rural communities are receiving even greater reductions, as much as 40 to 50 per cent.
- Taken together, these changes have delivered the single largest reduction to electricity rates in Ontario's history.

Records Disclosure/Process

- The Ministry of Energy conducted a records search consistent with the 40 plus search terms provided by the Auditor General (AG).
- The Ministry selected McCarthys/Wortzmans to assist with processing and analysis of approximately 2.2 million records that resulted from the search of 81 custodians. The Ministry provided all responsive records to the AG (i.e., more than 73,000 emails).
- The Ministry provided regularly the AG with batches of responsive documents. The Ministry completed its response to the AG on October 26, 2017.

Affordability Fund / Arm's Length Trusts

- A Trust structure was selected to implement the Affordability Fund in order to provide an effective solution to distributing funds to electricity distributors. With approximately 65 distributors across Ontario, it was not feasible for the Province to enter into agreements with each distributor.
- The Trust structure establishes an independent entity with expertise from the electricity distributor and community sectors.

- In terms of governance and accountability, there are report-back requirements on the use of funds transferred as well as the ability for the government to conduct an audit to gain assurance that the funds have been used for the purposes intended.

Electricity Bill Re-Design

- Electricity bills are a customer's main window into the electricity system. Through the 2017 Long-Term Energy Plan (2017 LTEP) consultation process, the Ministry of Energy heard that customers found their bills confusing and inaccessible.
- The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills. Comparisons of costs from previous billing periods will continue to be possible.
- Hydro One has been a leader in consumer research on ways to improve the appearance and comprehension of its bill. Hydro One enlisted the services of a behavioural research firm and engaged with thousands of customers to develop a new bill design which has been observed to increase customer satisfaction and comprehension.
- Building on this research, the Ministry of Energy launched the Bill Redesign Action Plan with the aim of revising the regulatory framework on invoicing to improve the value of electricity bills for consumers. The Ministry continues to engage with industry and consumers to better understand consumer concerns and preferences with respect to the bill to ensure that any proposed changes to the bill's design will meet consumer's needs.

Q&AS RESPONSE

Ontario's Fair Hydro Plan

Q. Why did the government introduce Ontario's Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Nearly \$70 billion¹ has been invested in the electricity system since 2003, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent for a typical residential consumer and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

To address the impact of our electricity system investments on consumers, OFHP includes:

- Refinancing the Global Adjustment (GA) over a longer term period for eligible consumers, including residents, small businesses, farms and long-term care homes.
- Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill. Eligible consumers will receive additional funding through assistance programs including:
 - o Establishing a new Affordability Fund which will support Ontarians who are not eligible for the [Home Assistance Program](#) and who have difficulty paying their electricity bills.
 - o Broadening Rural or Remote Rate Protection (RRRP) to provide distribution charge relief for the customers of the local distribution companies (LDCs) with the highest distribution charges.
 - o Expanding the Ontario Electricity Support Program (OESP) to increase participation and provide further assistance to eligible participants.
 - o Establishing a new On-Reserve First Nations Delivery Rate.
- Improving sector efficiency and modernizing Ontario's electricity market, working in collaboration with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).
- Any rate increases over the next four years will be held to the rate of inflation.

In the development of Ontario's Fair Hydro Plan, the government made the policy decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity social programs, such as OESP and RRRP. At the same time, the government also made a policy decision that these new measures would be more appropriately funded from the tax-base, not the rate-base.

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

If pressed on the cost of these new and enhanced social programs:

On March 2, 2017, the government publicly announced the enhancement of the existing OESP and RRRP and the new Affordability Fund and on-reserve First Nations delivery credit. At the time, the government indicated that these new measures would cost the government up to \$2.5 billion over the next three years.

Q. Why is the government refinancing the Global Adjustment? It seems like overly complex way to provide lower electricity rates.

To reduce pressure on today's electricity consumers, a portion of Global Adjustment (GA) costs is being refinanced. In later years, the cost of financing will be recovered from consumers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that the province has made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of Ontario Fair Hydro Plan (OFHP) is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

In developing the policy to refinance the GA, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

If pressed:

Ontario's Fair Hydro Plan (OFHP) operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. You say the \$4 billion Financial Accountability Office (FAO) number is wrong? So how much will it cost?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

The \$4 billion³ figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Since a number of variables (i.e., including interest rates, electricity demand and electricity costs) will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program

Ontario Power Generation (OPG), who has been identified as the Financial Services Manager (FSM) responsible for the financing plans and the Fair Hydro Trust (i.e., the entity that will manage the debt obligations), has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

If pressed on the details of the revised peak debt number and interest costs:

Peak debt for OFHP has been revised down from March 2017, from about \$28 billion⁴ to approximately \$20 billion⁵. The higher March 2017 estimate was used by the FAO in its May 2017 report.

The estimates of total interest cost also decreased from \$25 billion⁶ to less than \$19 billion⁷.

Updated estimates are consistent with 2017 Long-Term Energy Plan (2017 LTEP) projections, and include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on FAO analysis interest costs:

The FAO's analysis of the interest cost associated with 55 per cent of debt being financed by OPG through capital markets assumed a 90 basis point spread above the rate for Government

³ Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

⁴ Ministry of Energy

⁵ Ministry of Energy

⁶ Ministry of Energy

⁷ Ministry of Energy

of Ontario debt. This is based on an average Government of Ontario interest rate assumption of 4.5 per cent and an average OPG interest rate assumption of 5.4 per cent.

As noted above, Ontario's revised analysis assumes an average interest rate for all debt of 5 per cent over the life of the plan. For reference, OPG Trust's initial offering of senior debt (comprising 51 per cent of the total offering) came in at 3.357 per cent.

Q. Why didn't you use the Ontario Electricity Financial Corporation (OEFC) to finance Ontario's Fair Hydro Plan (OFHP), similar to the Debt Retirement Charge (DRC)?

There are crucial differences between the two situations.

For example, the Ontario Electricity Financial Corporation (OEFC) stranded debt had already been incurred when the restructuring took place.

In the case of Ontario Fair Hydro Plan (OFHP), the difference between what will be collected and what will be paid to generators is considered to be an asset in accordance with the accounting definition, as it will generate a specific future revenue stream in the form of the clean energy adjustment (CEA).

It is important to note that the 1999 restructuring led to an "unbundling" of the electricity rate. Prior to the 1999 restructuring and the 2002 market opening, there was a "bundled rate" for electricity that included cost recovery of generation and transmission costs, operating and capital – including debt costs, as well as central market operations costs. Including debt cost recovery and matching the timing of the capital cost recovery with the benefit to the ratepayer is a normal rate-setting regulatory practice.

The Debt Retirement Charge (DRC) represented the unbundling of a portion of the debt service costs. It effectively amortized the cost of the investments in long-lived assets (including debt incurred).

OFHP's Global Adjustment (GA) deferral is also intended to have costs recovered from specified ratepayers over a time period that better reflects the expected lives of those assets (versus the contract lengths that may be shorter than the expected useful life of the assets).

The difference between the 1999 restructuring and OFHP is that the DRC continued to pay down, over time, debt that had already been incurred, while under OFHP, an asset is being recorded to reflect a fair allocation of electricity costs between current and future ratepayers.

The intention of OFHP is to be forward-looking, to ensure that ratepayers are sharing current and future costs, whereas the DRC was backward-looking, replacing part of a bundled rate that was already spreading the cost recovery of the debt over time.

Q. The IESO has changed how it accounts for its market books. Did the government influence this decision?

No. The Independent Electricity System Operator (IESO) chose to begin recognizing its market accounts' assets (i.e., amounts due from power distributors) and liabilities (i.e., amounts due to power producers) in its financial results. The IESO chose to recognize these markets accounts on its books for transparency reasons, as it better reflects its net financial position on behalf of the IESO-administered markets at year-end.

The government supports the enhanced reporting and greater transparency for the economic activities of IESO resulting from the recognition of the market accounts.

In addition, IESO made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model.

Both accounting changes were accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion and were highlighted in IESO's annual report which was published online in March 2017.

Q. How does the 3.357 per cent price of the Ontario Power Generation's Fair Hydro Trust's first issuance of senior notes compare with the Ministry of Energy's Fair Allocation Amount (FAA) assumptions?

A number of inputs will vary over the thirty-year life of the Global Adjustment (GA) refinancing program and will continue to be revised to reflect changing conditions (e.g., changes in interest rates).

The Ministry analysis underpinning the *2017 Fair Allocation Amount* (2017 FAA) included a 5.0 per cent average interest rate over the life of the GA refinancing program (i.e., 30 years). Note: Navigant's modelling of GA refinancing assumed an interest rate of 4.5 per cent. In the development of the 2017 FAA the interest rate assumptions were revised to 5 per cent based on consultations with OPG.

On February 6, 2017, OPG announced that it was able to secure an interest rate of 3.357 per cent for the senior debt on its first issuance that has a 15 year term and a value of \$500 million.

- According to the Ontario Financing Authority (OFA), this represents a spread of 23 basis points over Ontario long-term debt (per an OFA email from February 2, 2017).

On February 8, 2017, OPG advised that the remainder of the debt is split between \$382 million of "subordinated" debt at an interest rate of 3.637 per cent and \$98 million of "junior subordinated" debt at 3.957 per cent.

The effective interest rate of 3.526 per cent is the weighted average of these three series of debt (i.e., senior, subordinated and junior subordinated).

If pressed about future debt offerings:

OPG advises that another debt offering is planned for the near future (i.e., likely April).

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Wouldn't it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG currently manages approximately \$20 billion⁸ in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

In addition, OPG has developed solid investor relationships and has a large investor base in the structured finance space that are the target market for financing Ontario's Fair Hydro Plan (OFHP) initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors⁹, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than \$2 billion¹⁰ and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

If pressed, details of OPG's Fair Hydro Trust's first successful issuance and future activities:

On February 6, 2017, OPG announced that it was able to secure an interest rate of 3.357 per cent for the senior debt on its first issuance that has a 15 year term and a value of \$500 million.

On February 8, 2017, OPG advised that the remainder of the debt is split between \$382 million of "subordinated" debt at an interest rate of 3.637 per cent and \$98 million of "junior subordinated" debt at 3.957 per cent.

The effective interest rate of 3.526 per cent is the weighted average of these three series of debt (i.e., senior, subordinated and junior subordinated).

OPG advises that another debt offering is planned for the near future (i.e., likely April).

Q. Who was involved in the policy and implementation of refinancing the Global Adjustment?

In developing Ontario's Fair Hydro Plan (OFHP) and the policy to refinance the GA, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

⁸ Ontario Financing Authority

⁹ Ontario Power Generation

¹⁰ Ontario Power Generation

In addition, senior officials and staff from several departments and agencies, led by the Ministry of Energy, met regularly in the development of the policy and structure of OFHP.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

Ontario's Fair Hydro Plan (OFHP) operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. When do we start paying the clean energy adjustment?

In order to ensure the cost of investments in the electricity are allocated fairly amongst current and future ratepayers, a portion of Global Adjustment (GA) costs is being refinanced.

Beginning in 2021, financing costs will be recovered from consumers through the clean energy adjustment, while borrowing will continue until approximately 2028.

Q. Does OPG make money running the Fair Hydro Trust?

Ontario Power Generation was identified as the Financial Services Manager (FSM) responsible for the Financing Plans and the financing entity (i.e., Fair Hydro Trust) that will manage the debt obligations under the Global Adjustment (GA) refinancing program.

OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

Under the *Ontario Fair Hydro Plan Act, 2017* and associated regulations, OPG is permitted to charge fees in its role as FSM. This ensures OPG is able to recover costs incurred in relation to its activities as FSM. The methodology for the calculation of fees is set out in regulation and includes performance-based components. The regulation also sets out the role of the Ontario's Energy Board (OEB) in reviewing and approving the fees.

In accordance with OPG's Financing Plan, 49 per cent of the debt obligations are purchased by OPG, funded by periodic equity injections from the Province and OPG's own corporate borrowing program.

OPG earns a return on its investment in the Trust, which ensures the transactions are commercial and meets accounting requirements. The remaining 51 per cent of the debt obligations are funded through the capital markets.

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. Global Adjustment (GA) refinancing was designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. How much is the tax-base paying to keep electricity rates low? Aren't these cost that should be borne by the rate-base?

In the development of Ontario's Fair Hydro Plan, the government made the decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity support programs, such as the Ontario Electricity Support Program (OESP) and Rural or Remote Rate Protection (RRRP).

At the same time, the government also made a policy decision that cost recovery for OESP and the majority of RRRP should be shifted off electricity bills to provincial revenues. This decision has lowered regulatory charges on all electricity bills by approximately \$3/MWh.

The OESP and RRRP are programs designed to support electricity consumers that are most vulnerable to increasing electricity costs. The government's decision to fund these programs through provincial revenues was taken in recognition of the fact that these programs are for the common good and are more appropriately supported by the tax-base rather than the rate-base.

Similarly, the 8 per cent rebate introduced in January 2017, which is equivalent to the provincial portion of the HST, is also funded through provincial revenues in recognition of the social, environmental and economic goals that were achieved through the transformation of the electricity system, including the phase out of coal-fired electricity generation.

On the other hand, given that the policy objective of GA refinancing is to more fairly allocate the cost of our investments over the useful life, not the contractual term, of electricity generating assets, it was our primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the refinancing of electricity assets.

If pressed on the cost of the new and enhanced social programs and the 8 per cent rebate:

On March 2, 2017, the government publicly announced the enhancement of the existing OESP and RRRP, the new Affordability Fund, and on-reserve First Nations delivery credit. At the time, the government indicated that these new measures would cost the government up to \$2.5 billion over the next three years.

Over this same three year period, the 8 per cent rebate introduced in January 2017, which is equivalent to the provincial portion of the HST, was forecast to cost the government roughly \$1 billion dollar per year.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a clean, reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's renewable electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that renewable generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets. This is the basis for the spreading of the costs across present and future generations of rate-payers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Q. What changes were made to the Industrial Conservation Initiative (ICI) as part of Ontario's Fair Hydro Plan?

Industrial Conservation Initiative (ICI) is a demand response program and cost allocation mechanism that was introduced in 2011 following consultation with our stakeholders.

ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours. This benefits companies financially, but it also benefits the electricity system by reducing the need for peaking generation, which reduces system costs that would otherwise need to be recovered from all Ontario ratepayers. It's a voluntary program and eligible consumers are able to opt in or out in June of each year.

As part of Ontario's Fair Hydro Plan (OFHP), ICI has been expanded to include smaller manufacturers and greenhouses with peak demand between 500 kW and 1 MW, in addition to the consumers over 1 MW who were already eligible.

- The smaller manufacturing and greenhouse consumers include those with North American Industry Classification System (NAICS) codes starting with 31-33 and 1114.
- Newly eligible participants would have begun to see the impact on their July 2017 bills.

This was in addition to an earlier regulatory amendment, effective January 2017, which had expanded the ICI to all consumers over 1 MW of average monthly peak demand.

Prior to these two expansions, there were approximately 300 ICI participants. For the current adjustment period there are approximately 1,100 participants, many of which would not have previously been eligible but realized they could benefit their companies or organizations by opting in to the program as a result of the expansions.

Records Disclosure / Process

Q. Why has the Ministry of Energy not provided all e-mails requested by the Auditor General?

The Ministry of Energy completed its response to the AG on October 26, 2017. The Ministry has provided all responsive records (more than 73,000 emails) to the AG.

Q. How much money did the Ministry spend on lawyers?

Although the retainer agreement includes a cap of up to \$500,000, the Ministry of Energy spent approximately \$150,000 on the retainer.

Q. What was the Ministry of Energy's process for providing the emails requested by the Auditor General?

The Ministry conducted a search consistent with the 40 plus search terms provided to the AG. In order to manage the approximately 2.2 million records resulted from the search of 81 custodians, the Ministry of Energy selected McCarthys/Wortzmans to assist with processing and analysis of the documents.

No legal advice on relevancy of documents was provided by Wortzmans. The Ministry completed its response to the AG on October 26, 2017.

Affordability Fund

Q. Why is there a need for an Affordability Fund?

From 2015 to early 2017, electricity distributors and other stakeholders indicated to the government that there was an immediate need to help customers struggling with their electricity bills, such as those in bill arrears and facing service disconnection.

Electricity distributors reported to the Ontario Energy Board (OEB) that around 56,500 customers were disconnected in 2015 and over 58,000 customers were disconnected in 2016. Electricity distributors also reported about 400,000 residential electricity accounts in arrears in 2016.

In January 2017, Hydro One submitted to the Ministry a report, “Addressing Affordability” which outlined a number of recommendations on electricity rate mitigation, including a recommendation to establish an Affordability Fund to assist struggling customers who do not qualify for low-income conservation programs.

Q. Who is eligible to benefit through the Affordability Fund and what measures will the average household receive?

Affordability Fund was established to provide energy efficiency measures to help those Ontarians not eligible for the Save on Energy Home Assistance Program, and who need support to improve the energy efficiency of their homes.

There are three levels of support available. The level each home qualifies for depends on net household income and average electricity bill. Measures offered may vary by participating electricity distributors:

- Level 1: households receive a Home Energy Kit with energy-saving products they can install themselves (e.g. LEDs, power bars, hot water pipe insulation).
- Level 2: Households may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include ENERGY STAR appliances (e.g. efficient air conditioners, refrigerators, and dehumidifiers).
- Level 3: For electrically-heated homes only, households that qualify for this level may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include insulation and/or an ENERGYSTAR heat pump.

Q. How many households are expected to benefit from the Affordability Fund?

Number of households that the \$100 million investment in the Affordability Fund will support will depend on the types of measures installed per household. Customers may be eligible to receive varying levels of support based on their total household income and average electricity bill.

As of January 12, 2018, 2,522 applications had been received by the Affordability Fund Trust, of which 1,794 have been delivered to 47 active LDCs. Eligible customers are expected to start receiving benefits through the Affordability Fund in early 2018. **Note:** Numbers are not static and should be updated (closer to Public Accounts) as they become available.

Electricity Bill Re-Design

Q. Isn't the problem the amount on people's bills, not the design?

The government recognizes that the much-needed investments in our electricity system have led to higher electricity prices. That's why the government developed Ontario's Fair Hydro Plan (OFHP) – to relieve the cost pressures caused by these system improvements.

Through the 2017 Long-Term Energy Plan (2017 LTEP) consultation process, the government heard that consumers find their current bills confusing and inaccessible, as part of 2017 LTEP, the Ministry committed to continue to work with the Ontario Energy Board (OEB), industry and consumers to explore opportunities to redesign electricity bills to make them easier for customers to understand.

Q. How can Ontarians know redesigning bills isn't just a way to hide increases?

The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills. Comparisons of costs from previous billing periods will continue to be possible.

Q. What is the overall cost of the bill redesign?

Each LDC will have different costs to implement a re-designed bill depending on current billing and customer information systems. Changes to billing systems are a part of an LDC's cost of doing business.

Q. Are all customers in Ontario getting redesigned bills, or just in some areas?

All LDCs will be required to comply with any new requirements implemented as part of a bill-redesign initiative. By March 31, 2018, all LDCs will come into compliance with the new requirement to provide customer-specific OFHP savings on invoices.

Q. How do the new regulatory amendments to require that LDCs provide customer-specific savings associated with Ontario's Fair Hydro Plan on invoices fit in to the broader redesign action plan?

The requirement for dynamic messaging or customer-specific Fair Hydro savings on invoices is the first step in the broader, longer term bill re-design project. Providing customer specific savings promotes greater understanding of the associated bill impacts of Ontario's Fair Hydro Plan (OFHP) for consumers.

The new regulatory amendments are being discussed with industry stakeholders as part of the bill redesign working group.

The Ministry of Energy is continuing to work with stakeholders to examine opportunities to redesign electricity bills to make them more understandable and to give consumers the information that they want on the bill.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

*Chapter 2, Public Accounts of the Province
Key Messages, Q&A Response and Issues
February 2018*

KEY MESSAGES

Ontario's Fair Hydro Plan

- The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher electricity bills.
- Ontario's Fair Hydro Plan has lowered electricity bills by 25 per cent for a typical residential consumer, and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.
- These measures include the 8 per cent rebate introduced in January 2017, which is equivalent to the provincial portion of the HST and build on previously announced initiatives to deliver broad-based rate relief on all electricity bills.
- Lower-income Ontarians and those living in eligible rural communities are receiving even greater reductions, as much as 40 to 50 per cent.
- Taken together, these changes have delivered the single largest reduction to electricity rates in Ontario's history.

Records Disclosure/Process

- The Ministry of Energy conducted a records search consistent with the 40 plus search terms provided by the Auditor General (AG).
- The Ministry selected McCarthys/Wortzmans to assist with processing and analysis of approximately 2.2 million records that resulted from the search of 81 custodians. The Ministry provided all responsive records to the AG (i.e., more than 73,000 emails).
- The Ministry provided regularly the AG with batches of responsive documents. The Ministry completed its response to the AG on October 26, 2017.

Affordability Fund / Arm's Length Trusts

- A Trust structure was selected to implement the Affordability Fund in order to provide an effective solution to distributing funds to electricity distributors. With approximately 65 distributors across Ontario, it was not feasible for the Province to enter into agreements with each distributor.
- The Trust structure establishes an independent entity with expertise from the electricity distributor and community sectors.

- In terms of governance and accountability, there are report-back requirements on the use of funds transferred as well as the ability for the government to conduct an audit to gain assurance that the funds have been used for the purposes intended.

Electricity Bill Re-Design

- Electricity bills are a customer's main window into the electricity system. Through the 2017 Long-Term Energy Plan (2017 LTEP) consultation process, the Ministry of Energy heard that customers found their bills confusing and inaccessible.
- The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills. Comparisons of costs from previous billing periods will continue to be possible.
- Hydro One has been a leader in consumer research on ways to improve the appearance and comprehension of its bill. Hydro One enlisted the services of a behavioural research firm and engaged with thousands of customers to develop a new bill design which has been observed to increase customer satisfaction and comprehension.
- Building on this research, the Ministry of Energy launched the Bill Redesign Action Plan with the aim of revising the regulatory framework on invoicing to improve the value of electricity bills for consumers. The Ministry continues to engage with industry and consumers to better understand consumer concerns and preferences with respect to the bill to ensure that any proposed changes to the bill's design will meet consumer's needs.

Q&AS RESPONSE

Ontario's Fair Hydro Plan

Q. Why did the government introduce Ontario's Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Nearly \$70 billion¹ has been invested in the electricity system since 2003, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent for a typical residential consumer and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

To address the impact of our electricity system investments on consumers, OFHP includes:

- Refinancing the Global Adjustment (GA) over a longer term period for eligible consumers, including residents, small businesses, farms and long-term care homes.
- Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill. Eligible consumers will receive additional funding through assistance programs including:
 - o Establishing a new Affordability Fund which will support Ontarians who are not eligible for the [Home Assistance Program](#) and who have difficulty paying their electricity bills.
 - o Broadening Rural or Remote Rate Protection (RRRP) to provide distribution charge relief for the customers of the local distribution companies (LDCs) with the highest distribution charges.
 - o Expanding the Ontario Electricity Support Program (OESP) to increase participation and provide further assistance to eligible participants.
 - o Establishing a new On-Reserve First Nations Delivery Rate.
- Improving sector efficiency and modernizing Ontario's electricity market, working in collaboration with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).
- Any rate increases over the next four years will be held to the rate of inflation.

In the development of Ontario's Fair Hydro Plan, the government made the policy decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity social programs, such as OESP and RRRP. At the same time, the government also made a policy decision that these new measures would be more appropriately funded from the tax-base, not the rate-base.

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

If pressed on the cost of these new and enhanced social programs:

On March 2, 2017, the government publicly announced the enhancement of the existing OESP and RRRP and the new Affordability Fund and on-reserve First Nations delivery credit. At the time, the government indicated that these new measures would cost the government up to \$2.5 billion over the next three years.

Q. Why is the government refinancing the Global Adjustment? It seems like overly complex way to provide lower electricity rates.

To reduce pressure on today's electricity consumers, a portion of Global Adjustment (GA) costs is being refinanced. In later years, the cost of financing will be recovered from consumers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that the province has made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of Ontario Fair Hydro Plan (OFHP) is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

In developing the policy to refinance the GA, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

If pressed:

Ontario's Fair Hydro Plan (OFHP) operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. You say the \$4 billion Financial Accountability Office (FAO) number is wrong? So how much will it cost?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

The \$4 billion³ figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Since a number of variables (i.e., including interest rates, electricity demand and electricity costs) will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program

Ontario Power Generation (OPG), who has been identified as the Financial Services Manager (FSM) responsible for the financing plans and the Fair Hydro Trust (i.e., the entity that will manage the debt obligations), has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

If pressed on the details of the revised peak debt number and interest costs:

Peak debt for OFHP has been revised down from March 2017, from about \$28 billion⁴ to approximately \$20 billion⁵. The higher March 2017 estimate was used by the FAO in its May 2017 report.

The estimates of total interest cost also decreased from \$25 billion⁶ to less than \$19 billion⁷.

Updated estimates are consistent with 2017 Long-Term Energy Plan (2017 LTEP) projections, and include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on FAO analysis interest costs:

The FAO's analysis of the interest cost associated with 55 per cent of debt being financed by OPG through capital markets assumed a 90 basis point spread above the rate for Government

³ Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

⁴ Ministry of Energy

⁵ Ministry of Energy

⁶ Ministry of Energy

⁷ Ministry of Energy

of Ontario debt. This is based on an average Government of Ontario interest rate assumption of 4.5 per cent and an average OPG interest rate assumption of 5.4 per cent.

As noted above, Ontario's revised analysis assumes an average interest rate for all debt of 5 per cent over the life of the plan. For reference, OPG Trust's initial offering of senior debt (comprising 51 per cent of the total offering) came in at 3.357 per cent.

Q. Why didn't you use the Ontario Electricity Financial Corporation (OEFC) to finance Ontario's Fair Hydro Plan (OFHP), similar to the Debt Retirement Charge (DRC)?

There are crucial differences between the two situations.

For example, the Ontario Electricity Financial Corporation (OEFC) stranded debt had already been incurred when the restructuring took place.

In the case of Ontario Fair Hydro Plan (OFHP), the difference between what will be collected and what will be paid to generators is considered to be an asset in accordance with the accounting definition, as it will generate a specific future revenue stream in the form of the clean energy adjustment (CEA).

It is important to note that the 1999 restructuring led to an "unbundling" of the electricity rate. Prior to the 1999 restructuring and the 2002 market opening, there was a "bundled rate" for electricity that included cost recovery of generation and transmission costs, operating and capital – including debt costs, as well as central market operations costs. Including debt cost recovery and matching the timing of the capital cost recovery with the benefit to the ratepayer is a normal rate-setting regulatory practice.

The Debt Retirement Charge (DRC) represented the unbundling of a portion of the debt service costs. It effectively amortized the cost of the investments in long-lived assets (including debt incurred).

OFHP's Global Adjustment (GA) deferral is also intended to have costs recovered from specified ratepayers over a time period that better reflects the expected lives of those assets (versus the contract lengths that may be shorter than the expected useful life of the assets).

The difference between the 1999 restructuring and OFHP is that the DRC continued to pay down, over time, debt that had already been incurred, while under OFHP, an asset is being recorded to reflect a fair allocation of electricity costs between current and future ratepayers.

The intention of OFHP is to be forward-looking, to ensure that ratepayers are sharing current and future costs, whereas the DRC was backward-looking, replacing part of a bundled rate that was already spreading the cost recovery of the debt over time.

Q. The IESO has changed how it accounts for its market books. Did the government influence this decision?

No. The Independent Electricity System Operator (IESO) chose to begin recognizing its market accounts' assets (i.e., amounts due from power distributors) and liabilities (i.e., amounts due to power producers) in its financial results. The IESO chose to recognize these market accounts on its books for transparency reasons, as it better reflects its net financial position on behalf of the IESO-administered markets at year-end.

The government supports the enhanced reporting and greater transparency for the economic activities of IESO resulting from the recognition of the market accounts.

In addition, IESO made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model.

Both accounting changes were accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion and were highlighted in IESO's annual report which was published online in March 2017.

Q. How does the 3.357 per cent price of the Ontario Power Generation's Fair Hydro Trust's first issuance of senior notes compare with the Ministry of Energy's Fair Allocation Amount (FAA) assumptions?

A number of inputs will vary over the thirty-year life of the Global Adjustment (GA) refinancing program and will continue to be revised to reflect changing conditions (e.g., changes in interest rates).

The Ministry analysis underpinning the *2017 Fair Allocation Amount* (2017 FAA) included a 5.0 per cent average interest rate over the life of the GA refinancing program (i.e., 30 years). Note: Navigant's modelling of GA refinancing assumed an interest rate of 4.5 per cent. In the development of the 2017 FAA the interest rate assumptions were revised to 5 per cent based on consultations with OPG.

On February 6, 2017, OPG announced that it was able to secure an interest rate of 3.357 per cent for the senior debt on its first issuance that has a 15 year term and a value of \$500 million.

On February 8, 2017, OPG advised that the remainder of the debt is split between \$382 million of "subordinated" debt at an interest rate of 3.637 per cent and \$98 million of "junior subordinated" debt at 3.957 per cent.

The effective interest rate of 3.526 per cent is the weighted average of these three series of debt (i.e., senior, subordinated and junior subordinated).

If pressed about future debt offerings:

OPG advises that another debt offering is planned for the near future (i.e., likely April).

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Wouldn't it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG currently manages approximately \$20 billion⁸ in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

In addition, OPG has developed solid investor relationships and has a large investor base in the structured finance space that are the target market for financing Ontario's Fair Hydro Plan (OFHP) initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors⁹, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than \$2 billion¹⁰ and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

If pressed, details of OPG's Fair Hydro Trust's first successful issuance and future activities:

On February 6, 2017, OPG announced that it was able to secure an interest rate of 3.357 per cent for the senior debt on its first issuance that has a 15 year term and a value of \$500 million.

On February 8, 2017, OPG advised that the remainder of the debt is split between \$382 million of "subordinated" debt at an interest rate of 3.637 per cent and \$98 million of "junior subordinated" debt at 3.957 per cent.

The effective interest rate of 3.526 per cent is the weighted average of these three series of debt (i.e., senior, subordinated and junior subordinated).

OPG advises that another debt offering is planned for the near future (i.e., likely April).

Q. Who was involved in the policy and implementation of refinancing the Global Adjustment?

In developing Ontario's Fair Hydro Plan (OFHP) and the policy to refinance the GA, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

⁸ Ontario Financing Authority

⁹ Ontario Power Generation

¹⁰ Ontario Power Generation

In addition, senior officials and staff from several departments and agencies, led by the Ministry of Energy, met regularly in the development of the policy and structure of OFHP.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

Ontario's Fair Hydro Plan (OFHP) operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. When do we start paying the clean energy adjustment?

In order to ensure the cost of investments in the electricity are allocated fairly amongst current and future ratepayers, a portion of Global Adjustment (GA) costs is being refinanced.

Beginning in 2021, financing costs will be recovered from consumers through the clean energy adjustment, while borrowing will continue until approximately 2028.

Q. Does OPG make money running the Fair Hydro Trust?

Ontario Power Generation was identified as the Financial Services Manager (FSM) responsible for the Financing Plans and the financing entity (i.e., Fair Hydro Trust) that will manage the debt obligations under the Global Adjustment (GA) refinancing program.

OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

Under the *Ontario Fair Hydro Plan Act, 2017* and associated regulations, OPG is permitted to charge fees in its role as FSM. This ensures OPG is able to recover costs incurred in relation to its activities as FSM. The methodology for the calculation of fees is set out in regulation and includes performance-based components. The regulation also sets out the role of the Ontario's Energy Board (OEB) in reviewing and approving the fees.

In accordance with OPG's Financing Plan, 49 per cent of the debt obligations are purchased by OPG, funded by periodic equity injections from the Province and OPG's own corporate borrowing program.

OPG earns a return on its investment in the Trust, which ensures the transactions are commercial and meets accounting requirements. The remaining 51 per cent of the debt obligations are funded through the capital markets.

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. Global Adjustment (GA) refinancing was designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. How much is the tax-base paying to keep electricity rates low? Aren't these cost that should be borne by the rate-base?

In the development of Ontario's Fair Hydro Plan, the government made the decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity support programs, such as the Ontario Electricity Support Program (OESP) and Rural or Remote Rate Protection (RRRP).

At the same time, the government also made a policy decision that cost recovery for OESP and the majority of RRRP should be shifted off electricity bills to provincial revenues. This decision has lowered regulatory charges on all electricity bills by approximately \$3/MWh.

The OESP and RRRP are programs designed to support electricity consumers that are most vulnerable to increasing electricity costs. The government's decision to fund these programs through provincial revenues was taken in recognition of the fact that these programs are for the common good and are more appropriately supported by the tax-base rather than the rate-base.

Similarly, the 8 per cent rebate introduced in January 2017, which is equivalent to the provincial portion of the HST, is also funded through provincial revenues in recognition of the social, environmental and economic goals that were achieved through the transformation of the electricity system, including the phase out of coal-fired electricity generation.

On the other hand, given that the policy objective of GA refinancing is to more fairly allocate the cost of our investments over the useful life, not the contractual term, of electricity generating assets, it was our primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the refinancing of electricity assets.

If pressed on the cost of the new and enhanced social programs and the 8 per cent rebate:

On March 2, 2017, the government publicly announced the enhancement of the existing OESP and RRRP, the new Affordability Fund, and on-reserve First Nations delivery credit. At the time, the government indicated that these new measures would cost the government up to \$2.5 billion over the next three years.

Over this same three year period, the 8 per cent rebate introduced in January 2017, which is equivalent to the provincial portion of the HST, was forecast to cost the government roughly \$1 billion dollar per year.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a clean, reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's renewable electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that renewable generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets. This is the basis for the spreading of the costs across present and future generations of rate-payers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Records Disclosure / Process

Q. Why has the Ministry of Energy not provided all e-mails requested by the Auditor General?

The Ministry of Energy completed its response to the AG on October 26, 2017. The Ministry has provided all responsive records (more than 73,000 emails) to the AG.

Q. How much money did the Ministry spend on lawyers?

Although the retainer agreement includes a cap of up to \$500,000, the Ministry of Energy spent approximately \$150,000 on the retainer.

Q. What was the Ministry of Energy's process for providing the emails requested by the Auditor General?

The Ministry conducted a search consistent with the 40 plus search terms provided to the AG. In order to manage the approximately 2.2 million records resulted from the search of 81 custodians, the Ministry of Energy selected McCarthys/Wortzmans to assist with processing and analysis of the documents.

No legal advice on relevancy of documents was provided by Wortzmans. The Ministry completed its response to the AG on October 26, 2017.

Affordability Fund

Q. Why is there a need for an Affordability Fund?

From 2015 to early 2017, electricity distributors and other stakeholders indicated to the government that there was an immediate need to help customers struggling with their electricity bills, such as those in bill arrears and facing service disconnection.

Electricity distributors reported to the Ontario Energy Board (OEB) that around 56,500 customers were disconnected in 2015 and over 58,000 customers were disconnected in 2016. Electricity distributors also reported about 400,000 residential electricity accounts in arrears in 2016.

In January 2017, Hydro One submitted to the Ministry a report, "Addressing Affordability" which outlined a number of recommendations on electricity rate mitigation, including a recommendation to establish an Affordability Fund to assist struggling customers who do not qualify for low-income conservation programs.

Q. Who is eligible to benefit through the Affordability Fund and what measures will the average household receive?

Affordability Fund was established to provide energy efficiency measures to help those Ontarians not eligible for the Save on Energy Home Assistance Program, and who need support to improve the energy efficiency of their homes.

There are three levels of support available. The level each home qualifies for depends on net household income and average electricity bill. Measures offered may vary by participating electricity distributors:

- Level 1: households receive a Home Energy Kit with energy-saving products they can install themselves (e.g. LEDs, power bars, hot water pipe insulation).
- Level 2: Households may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include ENERGY STAR appliances (e.g. efficient air conditioners, refrigerators, and dehumidifiers).
- Level 3: For electrically-heated homes only, households that qualify for this level may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include insulation and/or an ENERGY STAR heat pump.

Q. How many households are expected to benefit from the Affordability Fund?

Number of households that the \$100 million investment in the Affordability Fund will support will depend on the types of measures installed per household. Customers may be eligible to receive varying levels of support based on their total household income and average electricity bill.

As of January 12, 2018, 2,522 applications had been received by the Affordability Fund Trust, of which 1,794 have been delivered to 47 active LDCs. Eligible customers are expected to start receiving benefits through the Affordability Fund in early 2018. **Note:** Numbers are not static and should be updated (closer to Public Accounts) as they become available.

Electricity Bill Re-Design

Q. Isn't the problem the amount on people's bills, not the design?

The government recognizes that the much-needed investments in our electricity system have led to higher electricity prices. That's why the government developed Ontario's Fair Hydro Plan (OFHP) – to relieve the cost pressures caused by these system improvements.

Through the 2017 Long-Term Energy Plan (2017 LTEP) consultation process, the government heard that consumers find their current bills confusing and inaccessible, as part of 2017 LTEP, the Ministry committed to continue to work with the Ontario Energy Board (OEB), industry and consumers to explore opportunities to redesign electricity bills to make them easier for customers to understand.

Q. How can Ontarian's know redesigning bills isn't just a way to hide increases?

The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills. Comparisons of costs from previous billing periods will continue to be possible.

Q. What is the overall cost of the bill redesign?

Each LDC will have different costs to implement a re-designed bill depending on current billing and customer information systems. Changes to billing systems are a part of an LDC's cost of doing business.

Q. Are all customers in Ontario getting redesigned bills, or just in some areas?

All LDCs will be required to comply with any new requirements implemented as part of a bill-redesign initiative. By March 31, 2018, all LDCs will come into compliance with the new requirement to provide customer-specific OFHP savings on invoices.

Q How do the new regulatory amendments to require that LDCs provide customer-specific savings associated with Ontario's Fair Hydro Plan on invoices fit in to the broader redesign action plan?

The requirement for dynamic messaging or customer-specific Fair Hydro savings on invoices is the first step in the broader, longer term bill re-design project. Providing customer specific savings promotes greater understanding of the associated bill impacts of Ontario's Fair Hydro Plan (OFHP) for consumers.

The new regulatory amendments are being discussed with industry stakeholders as part of the bill redesign working group.

The Ministry of Energy is continuing to work with stakeholders to examine opportunities to redesign electricity bills to make them more understandable and to give consumers the information that they want on the bill.

OEMD

Education, Resources, and Economic Development Branch

Ontario's Fair Hydro Plan – Transfer Payments

NOTE: Based on the Ministry of Energy's 2017-2018 Third Quarter Finances, the tax-base currently provides approximately \$1.5 billion annually in support of electricity cost relief programs (i.e., rate mitigation activities).

ISSUE

The following table provides an overview the multi-year funding levels, currently tracking through the 2018-19 PRRT, for transfer payments under Ontario's Fair Hydro Plan.

- TB/MBC decided, through the PRRT process, to manage the following incremental funding requests centrally as risks. The Ministry will be able to access the Treasury Board Contingency fund should it not have sufficient internal offsets from elsewhere within its allocation to offset pressures as they arise.
 - On-Reserve First Nations Delivery Credit – \$0.9M in 2019-20, and \$1.9M in 2020-21.
 - Distribution Rate Protection Program – \$26.8M in 2018-19, \$47.6M in 2019-20, and \$53.2M in 2020-21.

These transfer payments are under executive control and can be redeployed only to address pressures in other transfer payments within Ontario's Fair Hydro Plan.

The 2017-18 minuteable savings are currently tracking to be minuted out of the Ministry's allocation.

Fair Hydro Plan Transfer Payments (18-19 PRRT Process) (As at February 22, 2018)

	2017-18 Plan	Interim 2017-18	2017-18 Minuteable Savings	2018-19	2019-20	2020-21
\$M						
Ontario Rebate for Electricity Consumers	939.0	883.0	(56.0)	860.0	861.0	871.0
Ontario Electricity Support Program*	137.8	25.2	(112.6)	229.2	264.0	288.0
Rural or Remote Rate Protection Program	344.0	324.0	(20.0)	238.7	239.9	241.2
<i>New in 2018-19 - Distribution Rate Protection (Part of RRRP in 2017-18)</i>	-	-	-	233.3	244.1	255.8
On-Reserve First Nations Delivery Credit	15.0	15.0	-	19.6	20.0	20.0
Sub - Total	1435.8	1247.2	(188.6)	1580.8	1629.0	1676.0
Northern Ontario Energy Credit	26.0	26.0	-	26.0	26.0	26.0
Total	1461.8	1273.2	(188.6)	1606.8	1655.0	1702.0

*\$2.2 million transferred to MCSS in 2017-18 Plan amount – To increase OESP enrollment among Social Assistance recipients

Prepared by: James Strang, (7-2071)
Date: February 26, 2018

Implementation of Ontario's Fair Hydro Plan

Week of March 13, 2017

Item	Key Deliverables / Considerations	Timing / Next Steps
1) Refinancing the Global Adjustment (ESP/IGS)		
ENERGY, LSB, IESO, OPG, OEB, TBS and MOF	- Legislation: - Defining mitigation and recovery mechanism; and - Establishing roles for IESO, OPG and OEB - Regulation (amend O.Reg.429/04) - Shareholder Declaration and Resolution - Third Party Technical Report re Long Lived Assets (TBD) - Accounting opinions from E&Y (OPG) and KPMG (IESO) - Financing: - IESO line of credit to bridge from May-July; - OEFC to OPG equity injection structure; and - OPG trust rating agency review and 3rd party lender market sounding (e.g., cost/term, etc) <u>Considerations</u> - GA refinancing legislation could also include legislative changes to enable broadening of RRRP, expanding of OESP and establishing of FN delivery credit. - Ongoing legal, accounting and financing risk assessments. - Impact on Electricity Sector Dedicated Income. - OEB-RPP Filing in May 2017. OEB may also be required to set new GA rate for RPP-eligible consumers.	- Report back to TBC/MBC by spring 2017, prior to going to LRC with any legislation, on the approach to refinance GA (per TBC/MBC Minute) - Report to TBC/MBC, LRC and Cabinet in spring 2017 (per Cabinet Minute) - Provide comfort level to allow OEB to include in May 2017 RPP - Summer 2017 implementation (June/July). OPG preference for July 1 to align with quarter-end
2) Broadening Rural or Remote Rate Protection (RRRP) (SNAP)		
ENERGY, LSB and LDCs	- Legislation - Regulation (TBD) <u>Considerations</u> - Consideration of revising definitions of RRRP program for broadening to other LDCs and continue to have current structure	- Report back to TB/MBC by Spring 2017 - Fall 2017 implementation (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
	in place to provide to existing consumers in Algoma and Remotes. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF. • Work with LDCs to consider any bill messaging.	
3) Expanding Ontario Electricity Support Program (OESP) (SNAP)		
• ENERGY, LSB and OEB	• Legislation • Regulation (TBD) <u>Considerations</u> • Reach out to OEB to consider whether surplus funding of ~\$100M could be used to increase OESP credits by 50%. Regulation can be updated quickly (need to consider whether posting on EBR is required). • Consider whether revised directive needed to continue having OEB administer program. • Legislation required to have program funded by taxpayers. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF.	• Report back to TB/MBC by Spring 2017 • Program in place in 2017 (per Cabinet Minute)
4) Providing a First Nations On-Reserve Delivery Credit (SNAP)		
• ENERGY and LSB	• Legislation • Regulation (TBD) <u>Considerations</u> • Work with LDCs on implementation details that need to be captured in legislation. • Legislation required to have program funded by taxpayers. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF. • Work with LDCs to consider any bill messaging.	• Report back to TB/MBC by Spring 2017 with final program details, including performance management framework, and clarifying how the programs aligns with the significant OEB estimate of program costs, from \$13M to \$20M • Program in place in 2017 (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
5) Establishing an Affordability Fund (CRED)		
ENERGY, IGS, LSB, TBS, MOF and H1	- TBC/MBC Submission - Trust Structure - Transfer Payment Agreement (multi-party) <u>Considerations</u> - Legislative changes not required. - Funding needs to flow to the Trust prior to March 31, 2017.	Week of March 6, 2017: - TBC/MBC approval (March 6th) - CAB approval (March 8th) - Follow up calls with several LDCs and EDA to provide updates and outline proposed principles for the Fund (Ongoing engagement with Hydro One, LSB, OPCD, CSD on principles and establishment of Trust and development of Transfer Payment Agreement (TPA) (including sharing of drafts for comment); Week of March 13, 2017: - Hydro One to finalize establishment of Trust by March 17th - Continue development of TPA, including circulating near to final version by March 17th Week of March 20, 2017: - Execute TPA between the Ministry and the Trust by March 22nd - Initiate process to flow funds to the Trust; to be completed before March 31st

Item	Key Deliverables / Considerations	Timing / Next Steps
		April to May 2017: - Additional trustees to be appointment; Trust develops further details, e.g. customer eligibility criteria and processes for LDCs to apply for funds; to be developed in consultation with LDCs June 2017: - Report back to TB/MBC with final program details and a performance management framework including outcome measures and targets Summer 2017: - LDCs begin to apply to the Trust for funds
6) Expanding ICI (ESP)		
ENERGY, LSB, IESO and LDCs	- Regulation (amend O.Reg.429/04) - Regulatory Registry (RR) posting <u>Considerations</u> - Amendments need to be in effect as much in advance of the consumer notification date to impact electricity bills this year (May 15, 2017). - RR posting is typically a minimum of 45-days for all regulatory changes affecting business to allow for review/comment. Note: RR posting is not a legal requirement but a best practice. - Working with the Ontario Chamber of Commerce on a targeted outreach campaign.	- RR posting on the proposed amendment - Report back to TBC/MBC by spring 2017 (per TBC/MBC Minute) - LRC [DATE] - Effective May 2017 (TBD)

Item	Key Deliverables / Considerations	Timing / Next Steps
7) Energy Sector Efficiencies (i.e., Ontario Energy Board and IESO) (SNAP / ESP)		
ENERGY, LSB, OEB and IESO	OEB: - Directive / Letter (TBD) <u>Considerations</u> - Signal efficiencies intent in OEB business plan letter - Work with OEB/LDCs on LTEP document and proposed directive to OEB IESO: - Directive / Letter (TBD) <u>Considerations</u> - Opportunity to highlight Market Renewal in the next LTEP. - IESO's stakeholder engagements on Market Renewal is ongoing. - Moving away from a two schedule system could impact consumer prices depending on implementation. - Most of the savings accrue from the move to a capacity auction. These savings do not materialize until the province has capacity requirements.	Continue this work as part of LTEP
8) Additional Initiatives for Small Business and Industrials (i.e., Class B) (ESP)		
ENERGY, MEDG, MOF, MOECC, MOL and Small Business	- Identify additional opportunities to assist Class B electricity consumers and small and medium sized manufacturers' <u>Considerations</u> - TBD	Report back to TBC/MBC and Cabinet in spring 2017 (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
9) Initiatives for Tenants (SNAP)		
ENERGY and MOH	- Explore ways to provide direct assistance to tenants that are not sub-metered and do not directly benefit under the existing and proposed rate mitigation programs <u>Considerations</u> - MHO leading any legislative/regulatory changes needed to have tenants benefit from program. Consider whether benefits are limited to 8% and GA (rather than OESP which is harder to provide to tenants who do not pay their bills). - ENERGY working with MCSS to streamline/automate enrollment for ODSP/OW consumers into OESP.	Report back to TBC/MBC and Cabinet in spring 2017 (Per Cabinet Minute)
10) Stakeholder/Agency Outreach (Communications)		
ENERGY	- Minister's letters to: - Ratepayers; - LDCs; - Business (e.g., OCC, CME, Concerned Manufactures, etc); and - Agencies (i.e., IESO, OPG, OEB and H1)	Early-mid March
11) FAO Engagement		
ENERGY, MOF/OFA, FAO	Provide FAO staff with a technical briefing on the OFHP	March 9, 2017: Preliminary discussion.

Subcommittee Contact List

GA Refinancing – Subcommittee

Organization	Department/Area	Contact	Email/Phone
Province	ENE Legal	Carolyn Calwell	Carolyn.calwell@ontario.ca 416.212.8392
		Paul Johnson	Paul.johnson3@ontario.ca 416.325.1834
		Dan Shear (Entity)	Dan.shear@ontario.ca 416.325.6685
		James Rebob (GA)	James.rebob@ontario.ca 416.325.6676
		Jennifer Kacaba	Jennifer.kacaba@ontario.ca 416.212.4867
	ENE Policy	Steen Hume	Steen.hume@ontario.ca 416.314.6190
		Tim Christie	Tim.christie@ontario.ca 416.325.6708
	MOF Policy	Scott Nelms	Scott.nelms@ontario.ca 416.212.6469
		Kaitlin Montgomery	Kaitlin.montgomery@ontario.ca 647.823.3428
	TBD/ OPCD	Cindy Veinot	Cindy.Veinot@ontario.ca 416.325.8017
	OFA	Nadine Petsche	Nadine.petsche@ontario.ca 416.325.8027
		Kwan, Ronald (policy)	Ronald.Kwan@ofina.on.ca 416.325.0909
		Ken Kandeepan (accounting)	Ken.kandeepan@ofina.on.ca 416.325.9814
		Mike Manning (Financing)	Mike.Manning@ofina.on.ca
OPG	Accounting	John Mauti	John.mauti@opg.com
		Alec Cheng (backup)	Alec.cheng@opg.com
	Legal	Les Wong	Les.wong@opg.com
		Tyler Mcauley (backup)	Tyler.mcauley@opg.com
	Financing	John Lee	john.s.lee@opg.com
IESO	Accounting / Financing	Kim Marshall	Kim.marshall@ieso.com
	Legal	Michael Boll	Michael.boll@ieso.com
OEB	TBC	TBC	TBC
KPMG	Accounting	Michel Picard	mpicard@kpmg.com Office: 416.777.8417 Cell: 416.560.2569
Blakes	Legal	Judy Wilson	Judy.Wilson@blakes.com

Social Programs – Subcommittee

Organization	Department/Area	Contact	Email/Phone
Province	ENE Policy	Michael Reid	Michael.Reid@ontario.ca 416.325.6544
		Sunita Chander	Sunita.Chander@ontario.ca 416.325.6594
	ENE Legal	James Rehob	James.rehob@ontario.ca 416.325-6676
		Dan Shear	Dan.shear@ontario.ca 416.325.6685
	TBS	TBD	TBD
	MOF	TBD	TBD
OEB	Policy	TBD	TBD
	Legal	TBD	TBD
Hydro One			

Affordability Fund – Subcommittee

Organization	Department/Area	Contact	Email/Phone
Province	ENE Policy	Kaili Sermat-Harding	Kaili.Sermat-Harding@ontario.ca 416.327.5555
		Usman Syed	Usman.Syed@ontario.ca 416.325.6651
	ENE Legal	Carolyn Calwell	Carolyn.calwell@ontario.ca 416.212.8392
		Paul Johnson	Paul.johnson3@ontario.ca 416.325.1834
		David Ranalli	David.Ranalli@ontario.ca 416.325.8414
		Michelle Schachtschneider	Michelle.Schachtschneider@ontario.ca 416.314.2937
	TBS / OPCD	Nadine Petsche	Nadine.Petsche@ontario.ca 416-325-8027
Hydro One	External Relations	Spencer Gill	Spencer.Gill@HydroOne.com
	External Relations	Alexandra Phillips	Alexandra.Phillips@HydroOne.com 416.345.1375
	Accounting	Samir Chhelavda	Samir.Chhelavda@HydroOne.com 416.345.5517
	Legal	James Scarlett	James.Scarlett@HydroOne.com
	Legal (Osler)	Peter Milligan	PMilligan@Osler.com 416.862.6634
Blakes	Legal	J.A. Prestage	Ja.prestage@blakes.com 416.863.2955

ICI / Manufactures and SMEs – Subcommittee

Organization	Department/Area	Contact	Email/Phone
Province	ENE Policy	Steen Hume	Steen.hume@ontario.ca 416.314.6190
		Tim Christie	Tim.christie@ontario.ca 416.325.670
	MEDG / Small Business	Victor Severino	victor.severino@ontario.ca 416.325.4655
	MOF	Sriram Subrahmanyam/ Ron Kwan?	sriram.subrahmanyam@ontario.ca 416.327.7294 ronald.kwan@ofina.on.ca 416.325.0909
	MOECC	Rob Fleming/Alex Wood	robert.fleming@ontario.ca 416.314.6352 alex.wood@ontario.ca 416.325.8569
	MOL	Marcelle Crouse	Marcelle.Crouse@ontario.ca 416.326.7555

Tenants – Subcommittee

Organization	Department/Area	Contact	Email/Phone
Province	ENE Policy	Michael Reid	Michael.Reid@ontario.ca 416.325.6544
		Sunita Chander	Sunita.Chander@ontario.ca 416.325.6594
	ENE Legal	n/a	
	Housing	TBD	
	MAG	TBD	
OEB	Policy / Legal		

Implementation of Ontario's Fair Hydro Plan

March 2017

Item	Key Deliverables / Considerations	Timing / Next Steps
1) Refinancing the Global Adjustment (ESP/IGS)		
ENERGY, LSB, IESO, OPG, OEB, TBS and MOF	- Legislation: - Defining mitigation and recovery mechanism; and - Establishing roles for IESO, OPG and OEB - Regulation (amend O.Reg.429/04) - Shareholder Declaration and Resolution - Third Party Technical Report re Long Lived Assets (TBD) - Accounting opinions from E&Y (OPG) and KPMG (IESO) - Financing: - IESO line of credit to bridge from May-July; - OEFC to OPG equity injection structure; and - OPG trust rating agency review and 3rd party lender market sounding (e.g., cost/term, etc) <u>Considerations</u> - GA refinancing legislation could also include legislative changes to enable broadening of RRRP, expanding of OESP and establishing of FN delivery credit. - Ongoing legal, accounting and financing risk assessments. - Impact on Electricity Sector Dedicated Income. - OEB-RPP Filing in May 2017. OEB may also be required to set new GA rate for RPP-eligible consumers.	- Report back to TBC/MBC by spring 2017, prior to going to LRC with any legislation, on the approach to refinance GA (per TBC/MBC Minute) - Report to TBC/MBC, LRC and Cabinet in spring 2017 (per Cabinet Minute) - Provide comfort level to allow OEB to include in May 2017 RPP - Summer 2017 implementation (June/July). OPG preference for July 1 to align with quarter-end
2) Broadening Rural or Remote Rate Protection (RRRP) (SNAP)		
ENERGY, LSB and LDCs	- Legislation - Regulation (TBD) <u>Considerations</u> - Consideration of revising definitions of RRRP program for broadening to other LDCs and continue to have current structure	- Report back to TB/MBC by Spring 2017 - Fall 2017 implementation (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
	in place to provide to existing consumers in Algoma and Remotes. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF. • Work with LDCs to consider any bill messaging.	
3) Expanding Ontario Electricity Support Program (OESP) (SNAP)		
• ENERGY, LSB and OEB	• Legislation • Regulation (TBD) <u>Considerations</u> • Reach out to OEB to consider whether surplus funding of ~\$100M could be used to increase OESP credits by 50%. Regulation can be updated quickly (need to consider whether posting on EBR is required). • Consider whether revised directive needed to continue having OEB administer program. • Legislation required to have program funded by taxpayers. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF.	• Report back to TB/MBC by Spring 2017 • Program in place in 2017 (per Cabinet Minute)
4) Providing a First Nations On-Reserve Delivery Credit (SNAP)		
• ENERGY and LSB	• Legislation • Regulation (TBD) <u>Considerations</u> • Work with LDCs on implementation details that need to be captured in legislation. • Legislation required to have program funded by taxpayers. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF. • Work with LDCs to consider any bill messaging.	• Report back to TB/MBC by Spring 2017 with final program details, including performance management framework, and clarifying how the programs aligns with the significant OEB estimate of program costs, from \$13M to \$20M • Program in place in 2017 (per Cabinet Minute)

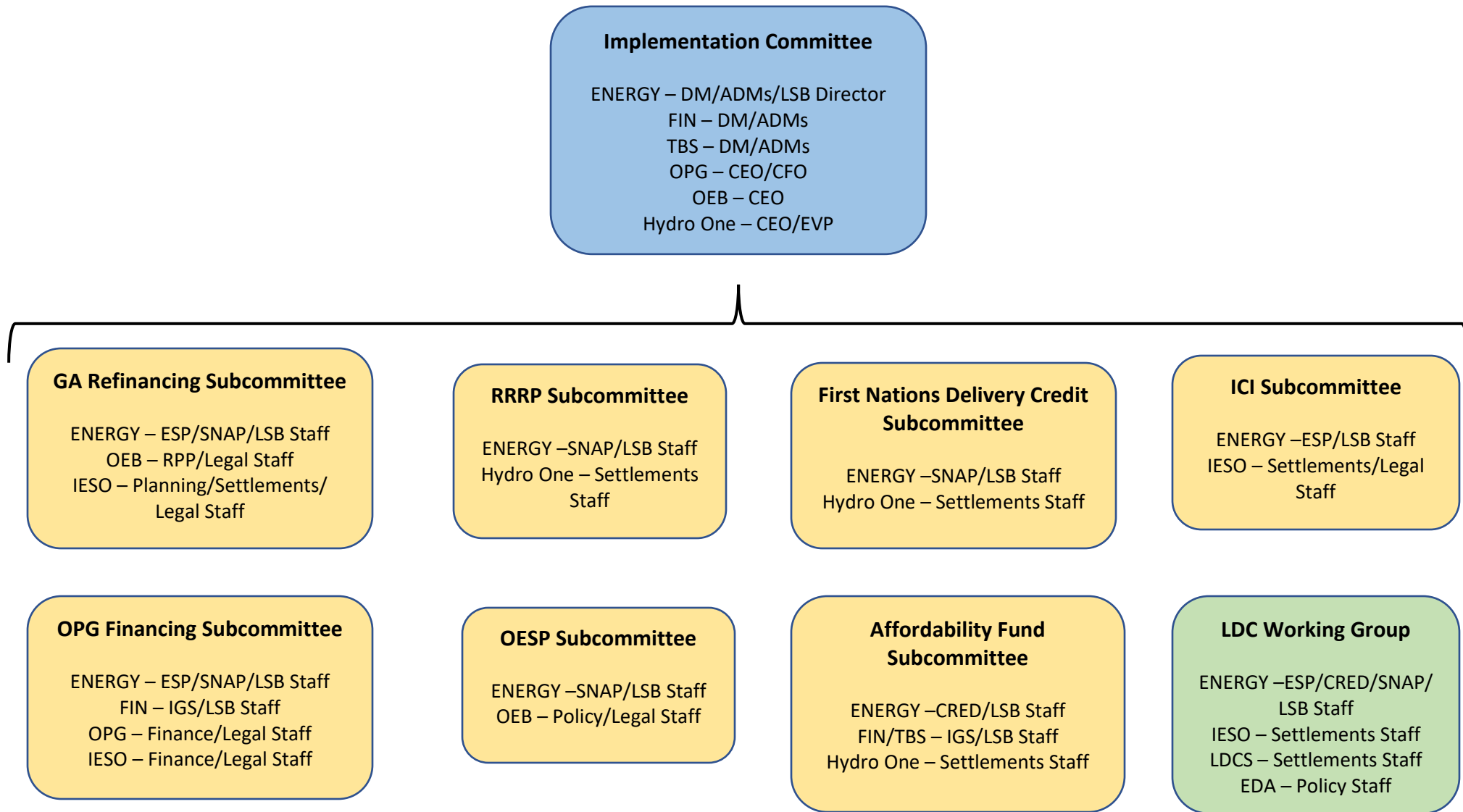
Item	Key Deliverables / Considerations	Timing / Next Steps
5) Establishing an Affordability Fund (CRED)		
ENERGY, IGS, LSB, TBS, MOF and H1	- TBC/MBC Submission - Trust Structure - Transfer Payment Agreement (multi-party) <u>Considerations</u> - Legislative changes not required. - Funding needs to flow to the Trust prior to March 31, 2017.	Week of March 6, 2017: - TBC/MBC (March 6th) - Follow up call with LDC group to discuss Trust principles (principles to be reflected in the Trust Deed) - Ongoing engagement with Hydro One, LSB, OPCD, CSD on establishment of Trust and development of Agreement (including sharing of drafts for comment) - Confirm Trust principles with Hydro One Week of March 13, 2017: - Hydro One to finalize establishment of Trust - Continue development of Agreement, including circulating near to final version by March 17th Week of March 20, 2017: - Execute Agreement by Hydro One, the Trust and the Ministry by March 22nd - Initiate process to flow funds to the Trust; to be completed before March 31st

Item	Key Deliverables / Considerations	Timing / Next Steps
		April to May 2017: - Trust develops specific customer eligibility criteria and processes for LDCs to apply for funds; to be developed in consultation with LDCs June 2017: - Report back to TB/MBC with final program details and a performance management framework including outcome measures and targets Summer 2017: - LDCs begin to apply to the Trust for funds
6) Expanding ICI (ESP)		
ENERGY, LSB, IESO and LDCs	- Regulation (amend O.Reg.429/04) - Regulatory Registry (RR) posting <u>Considerations</u> - Amendments need to be in effect as much in advance of the consumer notification date to impact electricity bills this year (May 15, 2017). - RR posting is typically a minimum of 45-days for all regulatory changes affecting business to allow for review/comment. Note: RR posting is not a legal requirement but a best practice. - Working with the Ontario Chamber of Commerce on a targeted outreach campaign.	- RR posting on the proposed amendment - LRC [DATE] - Effective May 2017 (TBD)

Item	Key Deliverables / Considerations	Timing / Next Steps
7) Energy Sector Efficiencies (i.e., Ontario Energy Board and IESO) (SNAP / ESP)		
ENERGY, LSB, OEB and IESO	OEB: - Directive / Letter (TBD) <u>Considerations</u> - Signal efficiencies intent in OEB business plan letter - Work with OEB/LDCs on LTEP document and proposed directive to OEB IESO: - Directive / Letter (TBD) <u>Considerations</u> - Opportunity to highlight Market Renewal in the next LTEP. - IESO's stakeholder engagements on Market Renewal is ongoing. - Moving away from a two schedule system could impact consumer prices depending on implementation. - Most of the savings accrue from the move to a capacity auction. These savings do not materialize until the province has capacity requirements.	Continue this work as part of LTEP
8) Additional Initiatives for Small Business and Industrials (i.e., Class B) (ESP)		
ENERGY, MEDG, MOF, MOECC, MOL and Small Business	- Identify additional opportunities to assist Class B electricity consumers and small and medium sized manufacturers' <u>Considerations</u> - TBD	Report back to TBC/MBC and Cabinet in spring 2017 (per Cabinet Minute)
9) Initiatives for Tenants (SNAP)		
ENERGY and MOH	Explore ways to provide direct assistance to tenants that are not sub-metered and do not directly benefit under the existing and proposed rate mitigation programs	Report back to TBC/MBC and Cabinet in spring 2017 (Per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
	<u>Considerations</u> • MHO leading any legislative/regulatory changes needed to have tenants benefit from program. Consider whether benefits are limited to 8% and GA (rather than OESP which is harder to provide to tenants who do not pay their bills). • ENERGY working with MCSS to streamline/automate enrollment for ODSP/OW consumers into OESP.	
10) Stakeholder/Agency Outreach (Communications)		
ENERGY	• Minister's letters to: - o Ratepayers; - o LDCs; - o Business (e.g., OCC, CME, Concerned Manufactures, etc); and - o Agencies (i.e., IESO, OPG, OEB and H1)	• Early-mid March

Structure of Implementation Committee



Implementation of Ontario's Fair Hydro Plan

March 2017

Item	Key Deliverables / Considerations	Timing / Next Steps
1) Refinancing the Global Adjustment (ESP/IGS)		
ENERGY, LSB, IESO, OPG, OEB, TBS and MOF	- Legislation: - Defining mitigation and recovery mechanism; and - Establishing roles for IESO, OPG and OEB - Regulation (amend O.Reg.429/04) - Shareholder Declaration and Resolution - Third Party Technical Report re Long Lived Assets (TBD) - Accounting opinions from E&Y (OPG) and KPMG (IESO) - Financing: - IESO line of credit to bridge from May-July; - OEFC to OPG equity injection structure; and - OPG trust rating agency review and 3rd party lender market sounding (e.g., cost/term, etc) <u>Considerations</u> - GA refinancing legislation could also include legislative changes to enable broadening of RRRP, expanding of OESP and establishing of FN delivery credit. - Ongoing legal, accounting and financing risk assessments. - Impact on Electricity Sector Dedicated Income. - OEB-RPP Filing in May 2017. OEB may also be required to set new GA rate for RPP-eligible consumers.	- Report back to TBC/MBC by spring 2017, prior to going to LRC with any legislation, on the approach to refinance GA (per TBC/MBC Minute) - Report to TBC/MBC, LRC and Cabinet in spring 2017 (per Cabinet Minute) - Provide comfort level to allow OEB to include in May 2017 RPP - Summer 2017 implementation (June/July). OPG preference for July 1 to align with quarter-end
2) Broadening Rural or Remote Rate Protection (RRRP) (SNAP)		
ENERGY, LSB and LDCs	- Legislation - Regulation (TBD) <u>Considerations</u> - Consideration of revising definitions of RRRP program for broadening to other LDCs and continue to have current structure	- Report back to TB/MBC by Spring 2017 - Fall 2017 implementation (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
	in place to provide to existing consumers in Algoma and Remotes. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF. • Work with LDCs to consider any bill messaging.	
3) Expanding Ontario Electricity Support Program (OESP) (SNAP)		
• ENERGY, LSB and OEB	• Legislation • Regulation (TBD) <u>Considerations</u> • Reach out to OEB to consider whether surplus funding of ~\$100M could be used to increase OESP credits by 50%. Regulation can be updated quickly (need to consider whether posting on EBR is required). • Consider whether revised directive needed to continue having OEB administer program. • Legislation required to have program funded by taxpayers. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF.	• Report back to TB/MBC by Spring 2017 • Program in place in 2017 (per Cabinet Minute)
4) Providing a First Nations On-Reserve Delivery Credit (SNAP)		
• ENERGY and LSB	• Legislation • Regulation (TBD) <u>Considerations</u> • Work with LDCs on implementation details that need to be captured in legislation. • Legislation required to have program funded by taxpayers. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF. • Work with LDCs to consider any bill messaging.	• Report back to TB/MBC by Spring 2017 with final program details, including performance management framework, and clarifying how the programs aligns with the significant OEB estimate of program costs, from \$13M to \$20M • Program in place in 2017 (per Cabinet Minute)

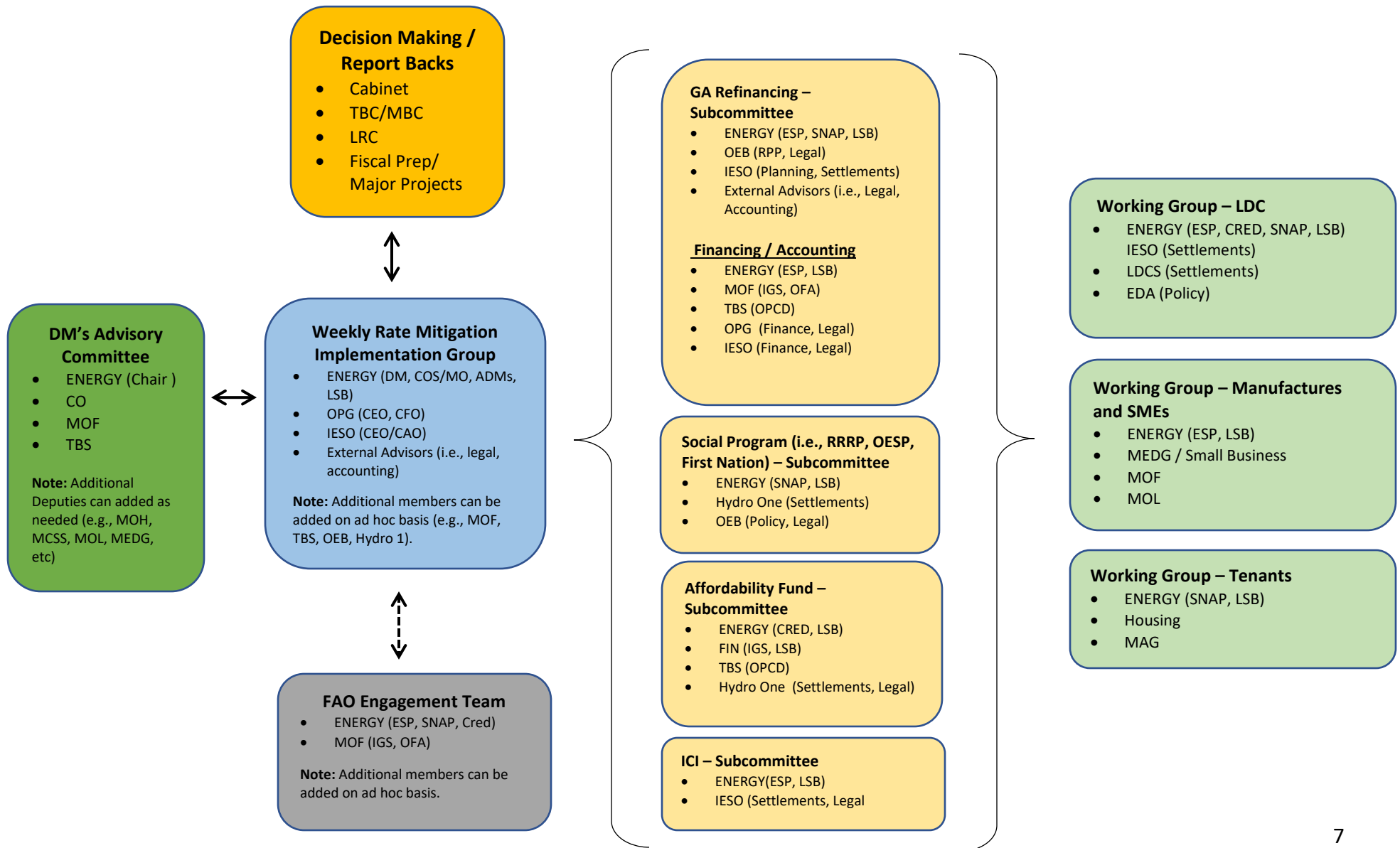
Item	Key Deliverables / Considerations	Timing / Next Steps
5) Establishing an Affordability Fund (CRED)		
ENERGY, IGS, LSB, TBS, MOF and H1	- TBC/MBC Submission - Trust Structure - Transfer Payment Agreement (multi-party) <u>Considerations</u> - Legislative changes not required. - Funding needs to flow to the Trust prior to March 31, 2017.	Week of March 6, 2017: - TBC/MBC (March 6th) - Follow up call with LDC group to discuss Trust principles (principles to be reflected in the Trust Deed) - Ongoing engagement with Hydro One, LSB, OPCD, CSD on establishment of Trust and development of Agreement (including sharing of drafts for comment) - Confirm Trust principles with Hydro One Week of March 13, 2017: - Hydro One to finalize establishment of Trust - Continue development of Agreement, including circulating near to final version by March 17th Week of March 20, 2017: - Execute Agreement by Hydro One, the Trust and the Ministry by March 22nd - Initiate process to flow funds to the Trust; to be completed before March 31st

Item	Key Deliverables / Considerations	Timing / Next Steps
		April to May 2017: - Trust develops specific customer eligibility criteria and processes for LDCs to apply for funds; to be developed in consultation with LDCs June 2017: - Report back to TB/MBC with final program details and a performance management framework including outcome measures and targets Summer 2017: - LDCs begin to apply to the Trust for funds
6) Expanding ICI (ESP)		
ENERGY, LSB, IESO and LDCs	- Regulation (amend O.Reg.429/04) - Regulatory Registry (RR) posting <u>Considerations</u> - Amendments need to be in effect as much in advance of the consumer notification date to impact electricity bills this year (May 15, 2017). - RR posting is typically a minimum of 45-days for all regulatory changes affecting business to allow for review/comment. Note: RR posting is not a legal requirement but a best practice. - Working with the Ontario Chamber of Commerce on a targeted outreach campaign.	- Report back to TBC/MBC by spring 2017 (per TBC/MBC Minute) - RR posting on the proposed amendment - LRC [DATE] - Effective May 2017 (TBD)

Item	Key Deliverables / Considerations	Timing / Next Steps
7) Energy Sector Efficiencies (i.e., Ontario Energy Board and IESO) (SNAP / ESP)		
ENERGY, LSB, OEB and IESO	OEB: - Directive / Letter (TBD) <u>Considerations</u> - Signal efficiencies intent in OEB business plan letter - Work with OEB/LDCs on LTEP document and proposed directive to OEB IESO: - Directive / Letter (TBD) <u>Considerations</u> - Opportunity to highlight Market Renewal in the next LTEP. - IESO's stakeholder engagements on Market Renewal is ongoing. - Moving away from a two schedule system could impact consumer prices depending on implementation. - Most of the savings accrue from the move to a capacity auction. These savings do not materialize until the province has capacity requirements.	Continue this work as part of LTEP
8) Additional Initiatives for Small Business and Industrials (i.e., Class B) (ESP)		
ENERGY, MEDG, MOF, MOECC, MOL and Small Business	- Identify additional opportunities to assist Class B electricity consumers and small and medium sized manufacturers' <u>Considerations</u> - TBD	Report back to TBC/MBC and Cabinet in spring 2017 (per Cabinet Minute)
9) Initiatives for Tenants (SNAP)		
ENERGY and MOH	Explore ways to provide direct assistance to tenants that are not sub-metered and do not directly benefit under the existing and proposed rate mitigation programs	Report back to TBC/MBC and Cabinet in spring 2017 (Per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
	<u>Considerations</u> • MHO leading any legislative/regulatory changes needed to have tenants benefit from program. Consider whether benefits are limited to 8% and GA (rather than OESP which is harder to provide to tenants who do not pay their bills). • ENERGY working with MCSS to streamline/automate enrollment for ODSP/OW consumers into OESP.	
10) Stakeholder/Agency Outreach (Communications)		
ENERGY	• Minister's letters to: - o Ratepayers; - o LDCs; - o Business (e.g., OCC, CME, Concerned Manufactures, etc); and - o Agencies (i.e., IESO, OPG, OEB and H1)	• Early-mid March

Governance and Delivery Structure for Implementation of Ontario's Fair Hydro Plan



Implementation of Ontario's Fair Hydro Plan

Week of March 6, 2017

Item	Key Deliverables / Considerations	Timing / Next Steps
1) Refinancing the Global Adjustment (ESP/IGS)		
ENERGY, LSB, IESO, OPG, OEB, TBS and MOF	- Legislation: - Defining mitigation and recovery mechanism; and - Establishing roles for IESO, OPG and OEB - Regulation (amend O.Reg.429/04) - Shareholder Declaration and Resolution - Third Party Technical Report re Long Lived Assets (TBD) - Accounting opinions from E&Y (OPG) and KPMG (IESO) - Financing: - IESO line of credit to bridge from May-July; - OEFC to OPG equity injection structure; and - OPG trust rating agency review and 3rd party lender market sounding (e.g., cost/term, etc) <u>Considerations</u> - GA refinancing legislation could also include legislative changes to enable broadening of RRRP, expanding of OESP and establishing of FN delivery credit. - Ongoing legal, accounting and financing risk assessments. - Impact on Electricity Sector Dedicated Income. - OEB-RPP Filing in May 2017. OEB may also be required to set new GA rate for RPP-eligible consumers.	- Report back to TBC/MBC by spring 2017, prior to going to LRC with any legislation, on the approach to refinance GA (per TBC/MBC Minute) - Report to TBC/MBC, LRC and Cabinet in spring 2017 (per Cabinet Minute) - Provide comfort level to allow OEB to include in May 2017 RPP - Summer 2017 implementation (June/July). OPG preference for July 1 to align with quarter-end
2) Broadening Rural or Remote Rate Protection (RRRP) (SNAP)		
ENERGY, LSB and LDCs	- Legislation - Regulation (TBD) <u>Considerations</u> - Consideration of revising definitions of RRRP program for broadening to other LDCs and continue to have current structure	- Report back to TB/MBC by Spring 2017 - Fall 2017 implementation (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
	in place to provide to existing consumers in Algoma and Remotes. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF. • Work with LDCs to consider any bill messaging.	
3) Expanding Ontario Electricity Support Program (OESP) (SNAP)		
• ENERGY, LSB and OEB	• Legislation • Regulation (TBD) <u>Considerations</u> • Reach out to OEB to consider whether surplus funding of ~\$100M could be used to increase OESP credits by 50%. Regulation can be updated quickly (need to consider whether posting on EBR is required). • Consider whether revised directive needed to continue having OEB administer program. • Legislation required to have program funded by taxpayers. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF.	• Report back to TB/MBC by Spring 2017 • Program in place in 2017 (per Cabinet Minute)
4) Providing a First Nations On-Reserve Delivery Credit (SNAP)		
• ENERGY and LSB	• Legislation • Regulation (TBD) <u>Considerations</u> • Work with LDCs on implementation details that need to be captured in legislation. • Legislation required to have program funded by taxpayers. • Technical/governance structures needed to flow taxpayer money to programs. Need to work with IESO/OEB/MOF. • Work with LDCs to consider any bill messaging.	• Report back to TB/MBC by Spring 2017 with final program details, including performance management framework, and clarifying how the programs aligns with the significant OEB estimate of program costs, from \$13M to \$20M • Program in place in 2017 (per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
5) Establishing an Affordability Fund (CRED)		
ENERGY, IGS, LSB, TBS, MOF and H1	- TBC/MBC Submission - Trust Structure - Transfer Payment Agreement (multi-party) <u>Considerations</u> - Legislative changes not required. - Funding needs to flow to the Trust prior to March 31, 2017.	Week of March 6, 2017: - TBC/MBC (March 6th) - Follow up call with LDC group to discuss Trust principles (principles to be reflected in the Trust Deed) - Ongoing engagement with Hydro One, LSB, OPCD, CSD on establishment of Trust and development of Agreement (including sharing of drafts for comment) - Confirm Trust principles with Hydro One Week of March 13, 2017: - Hydro One to finalize establishment of Trust - Continue development of Agreement, including circulating near to final version by March 17th Week of March 20, 2017: - Execute Agreement by Hydro One, the Trust and the Ministry by March 22nd - Initiate process to flow funds to the Trust; to be completed before March 31st

Item	Key Deliverables / Considerations	Timing / Next Steps
		April to May 2017: - Trust develops specific customer eligibility criteria and processes for LDCs to apply for funds; to be developed in consultation with LDCs June 2017: - Report back to TB/MBC with final program details and a performance management framework including outcome measures and targets Summer 2017: - LDCs begin to apply to the Trust for funds
6) Expanding ICI (ESP)		
ENERGY, LSB, IESO and LDCs	- Regulation (amend O.Reg.429/04) - Regulatory Registry (RR) posting <u>Considerations</u> - Amendments need to be in effect as much in advance of the consumer notification date to impact electricity bills this year (May 15, 2017). - RR posting is typically a minimum of 45-days for all regulatory changes affecting business to allow for review/comment. Note: RR posting is not a legal requirement but a best practice. - Working with the Ontario Chamber of Commerce on a targeted outreach campaign.	- RR posting on the proposed amendment - Report back to TBC/MBC by spring 2017 (per TBC/MBC Minute) - LRC [DATE] - Effective May 2017 (TBD)

Item	Key Deliverables / Considerations	Timing / Next Steps
7) Energy Sector Efficiencies (i.e., Ontario Energy Board and IESO) (SNAP / ESP)		
ENERGY, LSB, OEB and IESO	OEB: - Directive / Letter (TBD) <u>Considerations</u> - Signal efficiencies intent in OEB business plan letter - Work with OEB/LDCs on LTEP document and proposed directive to OEB IESO: - Directive / Letter (TBD) <u>Considerations</u> - Opportunity to highlight Market Renewal in the next LTEP. - IESO's stakeholder engagements on Market Renewal is ongoing. - Moving away from a two schedule system could impact consumer prices depending on implementation. - Most of the savings accrue from the move to a capacity auction. These savings do not materialize until the province has capacity requirements.	Continue this work as part of LTEP
8) Additional Initiatives for Small Business and Industrials (i.e., Class B) (ESP)		
ENERGY, MEDG, MOF, MOECC, MOL and Small Business	- Identify additional opportunities to assist Class B electricity consumers and small and medium sized manufacturers' <u>Considerations</u> - TBD	Report back to TBC/MBC and Cabinet in spring 2017 (per Cabinet Minute)
9) Initiatives for Tenants (SNAP)		
ENERGY and MOH	Explore ways to provide direct assistance to tenants that are not sub-metered and do not directly benefit under the existing and proposed rate mitigation programs	Report back to TBC/MBC and Cabinet in spring 2017 (Per Cabinet Minute)

Item	Key Deliverables / Considerations	Timing / Next Steps
	<u>Considerations</u> • MHO leading any legislative/regulatory changes needed to have tenants benefit from program. Consider whether benefits are limited to 8% and GA (rather than OESP which is harder to provide to tenants who do not pay their bills). • ENERGY working with MCSS to streamline/automate enrollment for ODSP/OW consumers into OESP.	
10) Stakeholder/Agency Outreach (Communications)		
• ENERGY	• Minister's letters to: - o Ratepayers; - o LDCs; - o Business (e.g., OCC, CME, Concerned Manufactures, etc); and - o Agencies (i.e., IESO, OPG, OEB and H1)	• Early-mid March
11) FAO Engagement		
• ENERGY, MOF/OFA, FAO	• Provide FAO staff with a technical briefing on the OFHP	• March 9, 2017: Preliminary discussion.

April [X], 2017

[CLIENT TO INSERT LETTERHEAD]

[CLIENT TO INSERT ADDRESSEE]

As announced on March 2, 2017, ~~the Government is committed to a~~Ontario's Fair Hydro Plan ~~that~~
~~will~~would lower electricity bills by 25% on average for all residential customers across the province, and
~~would~~will also benefit those living in rural communities ~~or with~~and those with low incomes.

In order to raise awareness and communicate information about programs and services that will be rolled out as part of Ontario's Fair Hydro Plan~~this Plan~~, Ontarians will need to be informed of changes to their electricity bills so that they can use this information to plan for the future as they manage their household budgets.

As with any legislative project, we must respect the legislative process and the sovereignty of our legislative institutions. Accordingly, those participants who are working with us to implement ~~the~~Ontario's Fair Hydro Plan programs and services are asked to be mindful, in their communications with their customers, not to include unqualified or definitive statements that could have the effect of predicting or presuming the outcome of a legislative decision.

We must all recognize that the importance of informing Ontarians of the proposed hydro relief programs is equally as important as ensuring that the message gets delivered in an appropriate manner.

Thank you for your attention to this issue.

[ETC]

STANDING COMMITTEE ON PUBLIC ACCOUNTS

CONSIDERATION OF CHAPTER 2, PUBLIC ACCOUNTS OF THE PROVINCE
FEBRUARY 2018

Topic	Cabinet Office	Treasury Board Secretariat			Ministry of Finance		Ministry of Energy					
	Secretary of Cabinet	Deputy Minister	Associate Deputy Minister, OTB	ADM, OPCD	Deputy Minister	CEO, OFA	Deputy Minister	ADM	Pres. & CEO, OPG	SVP & CFO, OPG	Pres. & CEO, IESO	VP & CFO, IESO
	Steve Orsini	Helen Angus	Karen Hughes	Cindy Veinot	Scott Thomson	Gadi Mayman	Serge Imbrogno	Steen Hume	Jeffrey Lyash	Ken Hartwick	Peter Gregg	Kimberley Marshall
Pension Asset Accounting		PENSION ACCOUNTING LEAD										
Rec # 1 - Pension Asset Accounting Advisory Panel Compensation		Overall - Pension Asset Accounting	Details - Pension Asset Accounting	Details - Pension Asset Accounting Advisory Panel Compensation								
IESO Accounting							IESO LEAD					
Rec # 2 - IESO Market Accounts		OPCD decision to accept IESO market accounts OPCD decision to accept IESO rate-regulated accounting Relationship with AG - AG Audit of 2017 Statements					OFHP Policy Overview OFHP Policy Overview 					

Fuss List – May 8, 2017

1. Committee
 - Clause by Clause
 - Government Motions
 - Opposition Motions
2. Regulations
 - Postings
 - Staging / Timing (i.e., Tranche 1 and 2)
 - Cabinet / LRC dates
3. Agency Relations
 - Agency timelines to enable July 1st effective date, agencies reviewing draft regulations
4. Working Groups
 - Confirm LDC WG needed from now until July, need to meet others
5. Navigant Report / Fair Allocation Amount
6. Weekly Rate Mitigation
 - Agencies
 - TB Reports Backs
7. Miscellaneous items
 - IESO / OPG Summaries of accounting
 - OFA / IESO line of credit
 - s28 indemnities approval
 - Commercial agreements
 - Rating agencies

Fuss List – TB Report Back

- IESO new credit facility/ OIC / OFA
- Report back to TB/MBC on the details of proposed regulations prior to going to LRC, and to provide the Board with an update towards completed legal, accounting and financing risk assessments.
 - Include a report related to GA Refinancing on findings from sensitivity analysis completed as assumptions vary, such as under different recovery rates, different interest rates, different demand, etc., and combinations of key factors, and then to quantify the likelihood of high/medium/low impact scenarios, with assumptions and methodologies clearly specified and documented.
 - Include electricity social programs with details of forecasting models and costing estimates, including assumptions, sensitivities analysis that would allow identification of risks to the fiscal plan for Broadening RRRP, OESP. The Ministry is to include similar information for the Ontario Rebate for Electricity Consumers.
- Report back with final program details for 2017-18 for GA Refinancing and Electricity Social Programs, including fiscal plan implications and consumer impacts with detailed assumptions and methodologies specified and documented.
- Report back with updates to risk mitigation strategies that address key financial and operational risks.
 - Broadening RRRP: Direct the Ministry to **report back to TB/MBC in 2017-18** on the effectiveness, efficiency, and sustainability. Report back to include, but not limited to:
 - Current program outcomes identified and results achieved to date, not just amount of funding flowed to consumers.
 - Establishing program performance management framework including targets for the broadened program now government funded
 - Report on and assessment of impacts of consolidation of LDCs
 - Assessment of distribution rates and implications for the program
 - OESP: Direct the Ministry to **report back to TB/MBC in 2017-18** on the program's effectiveness, efficiency, and sustainability. Report back to include, but not limited to:
 - Identify eligibility criteria, and refinements being made.
 - Current program outcomes identified and results achieved to date, not just amount of funding flowed to consumers.
 - Establishing program performance management framework including targets for the expanded program now government funded.

- Affordability Fund: Direct the Ministry to **report back through quarterly reporting** with program details, including performance management framework, and multi-year funding profile, and fiscal plan implications.
- On-Reserve First Nations Delivery Charge: Direct the Ministry to **report back to TB/MBC by Spring 2017** with final program details, including performance management framework, and clarifying how the programs aligns with the significant Ontario Energy Board estimate of program costs, from \$13M to \$20M.
- Industrial Conservation Initiative: Direct the Ministry to **report back through quarterly reporting** with results achieved versus expectations for the ICI program, impacts of the change for participation, and impact for ratepayers as costs are recovered from ratepayers.

Independent Electricity System Operator (IESO) – Work Plan Highlights

Refinancing GA

- KPMG and management are in process of restating 2016 and 2015 for regulatory accounting, Board of directors are aware of process, provincial controllers' office has been made aware.
- Would like to understand any requirements of IESO by the OEB to support RPP establishment. May need a transition plan for funding pre-establishment of OPG vehicle.

Broadening RRRP

- Who should we work with from a settlement perspective? There are precedents for treasury/cash flows.

OESP

- Need clarification and a contact to change the settlement process. Along with what would OEB administrative role, what is IESO role, we simply flow money to the LDC's right now. Some regular reporting to OEB.

First Nations Delivery Credit

- Who would we deal with regarding settlement.
- We currently settle Northern Industrial electricity rate program and couple of others as models.

OPTIONS NOTE – ACCOUNTING ANALYSIS MEMO

ISSUE:

OPTIONS:

- 1) Agency Chair / to Minister of Energy
- 2) Agency CEO to DM
- 3) Agency CFO/ Sr VP to ADM (ENERGY or OPCD)

Consideration

- CEO to Minister
- OPG SVP to DM
- IESO CEO to DM

Ontario's Fair Hydro Plan – Critical Path Dates

- April 28, 2017 – Pens down on drafting the Legislation
- May 1, 2017 – KPMG and E&Y Opinions
- May 2, 2017 – Caucus Briefing
- May 3, 2017 – Fiscal Prep Briefing
- May 8, 2017 – MMP Briefing
- May 8, 2017 – Interim Report from Navigant (Final report due June 5, 2017)
- May 9, 2017 – TB/MBC Report Back
- May 10, 2017 – LRC/Cabinet on Legislation
- May 11, 2017 – Introduction Legislation
- May 2017 – Regulatory Posting (TBD)
- May 2017 – Opposition Briefings (TBD)
- May 15, 16 and 17 – House debate on Legislation (TBD)
- Week of May 22 – Committee to review Legislation (TBD)
- June 2017 – LRC with Regulations

Ontario's Fair Hydro Plan – Critical Path Dates

(Week of May 1, 2017)

- April 28, 2017 – Pens down on drafting the Legislation
- May 1, 2017 – KPMG and E&Y Opinions
- May 2, 2017 – Caucus Briefing
- May 3, 2017 – Fiscal Prep Briefing
- May 2017 – MMP Briefing (TBD)
- May 2017 – Agency Admin items (TBD)
 - o OPG Shareholder Resolution
 - o Indemnities for OPG and IESO Boards
- May 8, 2017 – Interim Report from Navigant (Final report due June 5, 2017)
- May 9, 2017 – TB/MBC Report Back
 - o Legal Opinions
 - o Accounting Opinion
 - o OFA Financial Viability work (in collaboration with TD Bank)
 - o OPG Business Plan Concurrence - required for OEB process
- May 10, 2017 – LRC/Cabinet on Legislation
- May 11, 2017 – Introduction Legislation
- May 2017 – Regulatory Posting (TBD)
- May 2017 – Opposition Briefings (TBD)
- May 15, 16, 17, and 18, 2017 – House debate on Legislation (TBD)
- Week of May 24, 2017 – Committee to review Legislation (TBD)
 - o Public Hearings
 - o Clause by Clause / Amendments
- Week of May 30, 2017 – Passage (TBD)
- June 2017 – LRC with Regulations

Ontario's Fair Hydro Plan – Critical Path Dates

(Week of May 1, 2017)

- April 28, 2017 – Pens down on drafting the Legislation
- May 1, 2017 – KPMG and E&Y Opinions
- May 2, 2017 – Caucus Briefing
- May 3, 2017 – Fiscal Prep Briefing
- May 2017 – MMP Briefing (TBD)
- May 2017 – Agency Admin items (TBD)
 - o OPG Shareholder Resolution
 - o Indemnities for OPG and IESO Boards
- May 8, 2017 – Interim Report from Navigant (Final report due June 5, 2017)
- May 9, 2017 – TB/MBC Report Back
 - o Legal Opinions
 - o Accounting Opinion
 - o OFA Financial Viability work (in collaboration with TD Bank)
 - o OPG Business Plan Concurrence – Required for OEB process
- May 10, 2017 – LRC/Cabinet on Legislation
- May 11, 2017 – Introduction Legislation
- May 2017 – Regulatory Posting (TBD)
- May 2017 – Opposition Briefings (TBD)
- May 15, 16, 17, and 18, 2017 – House debate on Legislation (TBD)
- Week of May 24, 2017 – Committee to review Legislation (TBD)
 - o Public Hearings
- Week of May 29, 2017
 - o Clause by Clause / Amendments
 - o Passage (TBD)
- June 2017 – LRC with Regulations

Ontario's Fair Hydro Plan – Critical Path Dates

(Week of May 8, 2017)

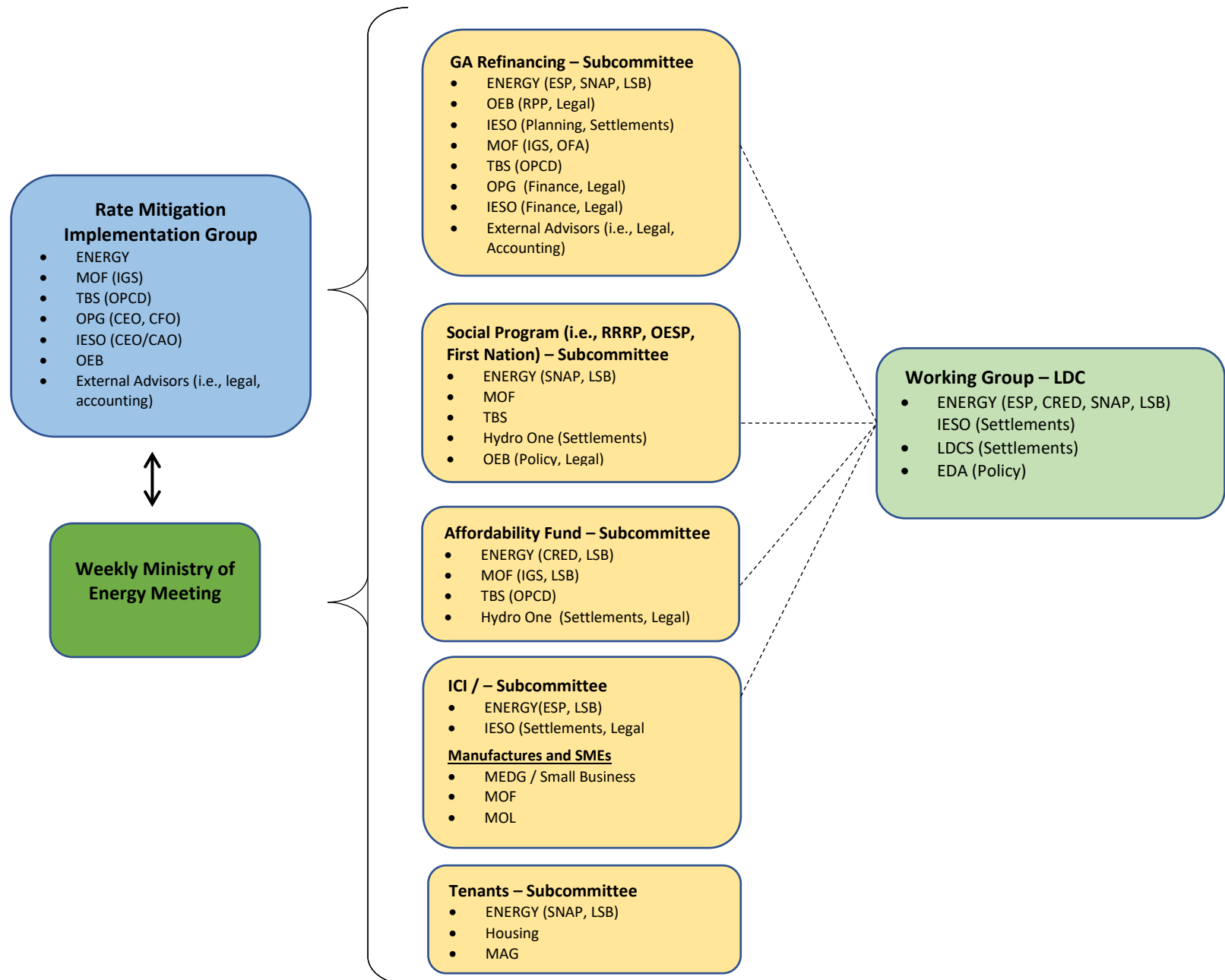
- April 28, 2017 – Pens down on drafting the Legislation
- May 1, 2017 – KPMG and E&Y Opinions
- May 2, 2017 – Caucus Briefing
- May 3, 2017
 - o Fiscal Prep Briefing
 - o MMP Briefing
- May 2017 – Agency Admin items
 - o OPG Shareholder Resolution
 - o Indemnities for OPG and IESO Boards
 - o s.28 Approval
- May 8, 2017 – Interim Report from Navigant (Final report due June 5, 2017)
- May 9, 2017 – TB/MBC Report Back
 - o Accounting
 - o Financial viability work (OFA in collaboration with TD Securities)
 - o Legal considerations
 - o OPG Business Plan Concurrence – Required for OEB process
- May 10, 2017 – LRC/Cabinet on Legislation
- May 11, 2017 – Introduction Legislation
- May 12, 2017 – Regulatory Posting (TBD)
- May 2017 – Opposition Briefings (TBD)
- May 15, 16, 17, and 18, 2017 – House debate on Legislation (TBD)
- Week of May 24, 2017 – Committee to review Legislation (TBD)
 - o Public Hearings
- Week of May 29, 2017
 - o Clause by Clause / Amendments
 - o Passage (TBD)
- June 14, 2017 – Regulations (Direct to Cabinet) (TBD)

Ontario's Fair Hydro Plan – Critical Path Dates

(Week of May 15, 2017)

- April 28, 2017 – Pens down on drafting the Legislation
- May 1, 2017 – KPMG and E&Y Opinions
- May 2, 2017 – Caucus Briefing
- May 3, 2017
 - o Fiscal Prep Briefing
 - o MMP Briefing
- May 8, 2017 – Interim Report from Navigant (Final report due June 5, 2017)
- May 9, 2017 – TB/MBC Report Back
 - o Accounting
 - o Financial viability work (OFA in collaboration with TD Securities)
 - o Legal considerations
 - o OPG Business Plan Concurrence – Required for OEB process
- May 10, 2017 – LRC/Cabinet on Legislation
- May 11, 2017 – Introduction Legislation
- May 12, 2017 – Regulatory Posting (TBD)
- May 15, 2017 – Opposition Briefings
- May 2017 – Agency Admin items
 - o OPG Shareholder Resolution
 - o Indemnities for OPG and IESO Boards
 - o s.28 Approval
- May 15, 16, 17, and 18, 2017 – House debate on Legislation (TBD)
- Week of May 24, 2017 – Committee to review Legislation (TBD)
 - o Public Hearings
- Week of May 29, 2017
 - o Committee / Clause by Clause / Amendments
 - o Passage (TBD)
- June 14 and 27, 2017 – Regulations (Direct to Cabinet)

Governance and Delivery Structure for Implementation of Ontario's Fair Hydro Plan



Work List

- Big Policy Questions
 - o Establishing a regulator asset
 - o Role of the OEB
 - o What happens after 5 yrs
- Legal
 - o Legislation
 - o Letter
- IESO
 - o Sales and Purchase Agreement
- OPG
 - o Role for trustees vs. administrator
 - o Trustee appointments
 - o Active Administrators
 - o Indemnities

Subcommittee Contact List

GA Refinancing – Subcommittee

Organization	Department/Area	Contact	Email/Phone
Province	ENE Legal	Carolyn Calwell	Carolyn.calwell@ontario.ca 416.212.8392
		Paul Johnson	Paul.johnson3@ontario.ca 416.325.1834
		Dan Shear (Entity)	Dan.shear@ontario.ca 416.325.6685
		James Rehob (GA)	James.rehob@ontario.ca 416.325.6676
		Jennifer Kacaba	Jennifer.kacaba@ontario.ca 416.212.4867
	ENE Policy	Steen Hume	Steen.hume@ontario.ca 416.314.6190
		Tim Christie	Tim.christie@ontario.ca 416.325.6708
	MOF Policy	Scott Nelms	Scott.nelms@ontario.ca 416.212.6469
		Kaitlin Montgomery	Kaitlin.montgomery@ontario.ca 647.823.3428
	OPCD – Accounting	Nadine Petsche	Nadine.petsche@ontario.ca 416.325.8027
	OFA – Accounting	Ken Kandeepan	Ken.kandeepan@ofina.on.ca 416.325.9814
OPG	Accounting	John Mauti	John.mauti@opg.com
		Alec Cheng (backup)	Alec.cheng@opg.com
	Legal	Les Wong	Les.wong@opg.com
		Tyler Mcauley (backup)	Tyler.mcauley@opg.com
IESO	Accounting	Kim Marshall	Kim.marshall@ieso.com
	Legal	Michael Boll	Michael.boll@ieso.com
OEB	TBC	TBC	TBC
KPMG	Accounting	Michel Picard	mpicard@kpmg.com Office: 416.777.8417 Cell: 416.560.2569
Blakes	Legal	Judy Wilson	Judy.Wilson@blakes.com

Social Programs – Subcommittee

Organization	Department/Area	Contact	Email/Phone
Province	ENE Policy		
	ENE Legal		
	TBS		
	MOF		
OEB	Policy		
	Legal		
Hydro One			

Affordability Fund – Subcommittee

Organization	Department/Area	Contact	Email/Phone
Province	ENE Policy		
	ENE Legal		
	TBS – OPCD		
	MOF		
Hydro One			

ICI / Manufactures and SMEs – Subcommittee

Organization	Department/Area	Contact	Email/Phone
Province	ENE Policy	Steen Hume	Steen.hume@ontario.ca 416.314.6190
		Tim Christie	Tim.christie@ontario.ca 416.325.6708
	ENE Legal		
	MEDG / Small Business		
	MOF		
	MOL		
IESO	Settlements		
	Legal		

Tenants – Subcommittee

Organization	Department/Area	Contact	Email/Phone
Province	ENE Policy		
	ENE Legal		
	Housing		
	MAG		
OEB			

Status of OFHP Products – List

- Cabinet Submission / Appendix – Completed
- TB 20 Submission / Appendix – Completed
- LRC Approval Form / Appendix (i.e., Legislation, Variance memo and Compendium) – Completed
- Opposition Briefing Deck – In progress (Working draft sent up on Friday)
- Committee Motion Amendments – In progress
- Communications Products – In progress
- Letter to IESO (response to May 1 letter) – In progress
- Letter to OPG – In progress

The legislation contains provisions to mitigate the constitutional law risks, including requiring the Minister of Energy to reallocate estimated clean energy costs attributable to each reference period in a way that takes into account the need to align those costs with the estimated clean energy benefits attributable to the same period. Limiting the near-term rate reductions to such amounts which can be justified as counterbalancing disproportionate GA payments during the 2005-2017 period ensures that the statutory 25% reduction is consistent with proportionate reallocation.

- The Ministry has worked closely with third-party financial advisors in advance of and throughout the drafting process to help to ensure that the proposed legislation enables refinancing of the GA.
 - The proposed legislation ~~enables sets out that~~ the province ~~to would~~ provide assurances in the form of a “provincial guarantee” to OPG and investors regarding the permanence of the GA Refinancing framework and the authority of the legislature to pass the legislation. The intent is to ensure that the full value ~~of any investment~~ is recovered.
 - The legislation also enables the Province to guarantee borrowing of the OPG SPV/Trust in the event of a market disruption ~~to mitigate OPG’s financing risk~~. Specifics of these guarantees will be determined in agreements to be negotiated later this year.
- It is still possible that the full value of the Regulatory Asset may not be purchased. In such cases, IESO may be able to retain the unsold amounts recorded in its variance account for a short period of time.

Navigant Report

Vote 2905-01

In addition to the report back, the Ministry is also requesting the creation of a new transfer payment line, “Price Mitigation Support Initiatives” in Vote 2905-01. The purpose for this is to provide the Ministry an appropriate transfer payment line to support future activities and initiatives around electricity price mitigation for Ontarians.

There is no fiscal impact associated with this request. All new funding placed into the transfer payment lines will be offset by services dollars previously approved within the Ministry’s multi-year allocation

OPG

The Ministry has worked closely with the Ontario Power Generation (OPG) and E&Y, on the accounting requirements to enable GA Refinancing with respect to consolidation (i.e., legislation, applications of accounting standards/principles, establishing a special purpose vehicle (SPV) / Trust).

The proposed legislation and the associated amendments to the Electricity Act, 1998, enshrine OPG's SPV/Trust as a stand-alone entity able to conduct business separately under a Trust agreement. Note: To further support the operations and mechanics of the OPG SPV/Trust, additional work will be done through the regulations and supporting agreements/documents.

- OPG will have the authority to set up the SPV/Trust and assign it with powers regarding decision-making, funding and ongoing operation.
- OPG and IESO are developing a process that will allow interest payments to occur under GA Refinancing.

Based on the existing and proposed legislation, key operating conditions being addressed in regulations and supporting agreements/documents and no introduction of new conditions that would conflict with OPG's control of the SPV/Trust, E&Y concurs with OPG's assessment that the accounting requirements to support "consolidation" of OPG SPV / Trust with OPG Inc. can be met.

KPMG

The Ministry has worked closely with the Independent Electricity System Operator (IESO) and KPMG on the accounting considerations of GA Refinancing (i.e., legislation, applications of accounting standards/principles, minimizing consolidation risks and ability to establish a regulatory asset).

In particular, the proposed legislation provides a structure that IESO and KPMG believe meets the necessary accounting requirements. Key elements include:

- An IESO variance account created by the proposed legislation that would be recognized as a "regulatory asset".
- An Ontario Power Generation (OPG) special purpose vehicle (SPV) / Trust that would not be controlled by IESO and thus have no consolidation risk for IESO.

In addition, KPMG provided some commentary on the accounting requirement for the "derecognition" of the regulatory asset once it's sold to OPG SPV/Trust. KPMG advised that the regulatory asset should be derecognized upon transfer to the OPG SPV/Trust as IESO no longer has rights or obligations to the asset (i.e., the transformation from a regulatory asset to an investment asset).

Financing

The Ministry has been worked closely with the Ontario Financing Authority (OFA) and TD Securities (TD), as the Province's external financial advisor, on the financing structure (i.e., legislation, provincial guarantees, OPG's equity injections and IESO's enhanced credit facilities).

In particular, the proposed legislation enables a structure that OFA and TD believe will enable financing at a reasonable cost. Key elements that support this financing structure include:

- OPG issuances of subordinated debt to the SPV representing up to 49% of total borrowing; and
- Conditional (springing) guarantees by the Province to provide a backstop in the event of specific and limited events (e.g., changes to legislation that harm investor interests).

Note: The ability to finance and the cost of financing will only be known with certainty once OPG takes this structure to market.

Q&A Response

Q1. Can ENERGY provide their forecast for OREC costs April to June 2017?

	Apr-17		May-17		Jun-17	
	Forecast	Actual	Forecast	Actual	Forecast	Actual
OREC Cost	\$ 80,394,163	\$71,076,542	\$ 84,565,303	\$72,432,711	\$ 90,132,831	\$n/a

Note: Forecast consistent with September 2016 data. Actuals provided by Corporate Services.

Q2. Given that the actuals for Jan-Mar 2017 are lower than the forecasted amount, what is the justification to maintain the buffer?

Based on continued forecast uncertainties, as detailed in the previous statement below, ENERGY suggests that the buffer remains and be reviewed after the first 12 months.

(Context below provided by Corporate Services)

\$300 million was forecasted as OREC expense from January 1 to March 31, 2017. Of this amount, \$29 million of this amount was identified as a buffer for factors in variance in electricity consumption caused by weather and rate fluctuations. Previously, the explanation for the buffer was as follows:

“The Ministry has added an additional \$29 million buffer (approximately 10%) to account for uncontrollable factors that impact program forecast. The ministry’s estimates are subject to variances as result of uncertainties in demand (driven by unexpected weather patterns that change consumption) and energy prices. The ministry’s forecast is also impacted by unknowns in forecasting due to information lag at early program implementation stage; and unknowns of financial impact of the program without a monthly cap.”

Q3. Can ENERGY provide a comparison of the actual electricity usage and billings for the months of January to March 2016, as compared to the same months in 2017?

	January			February			March		
	2014	2016	2017	2014	2016	2017	2014	2016	2017
Actual Electricity Usage (TWh)	13.61	12.38	12.11	12.07	11.47	10.61	12.67	11.30	11.55
System Cost (\$M)	1,051	1,240	1,188	1,136	1,207	1,074	1,017	1,186	1,070

Note: 2014 is also included to illustrate the impact of extreme weather conditions (in this case, the polar vortex).

Q& A Response – October 16, 2017 Reg. Bundle

Q. Could the Ministry of Energy please confirm the amendments it is proposing for October 16, 2017 LRC?

The Ministry of Energy is seeking to amend Ontario Regulation 206/17 (i.e., general regulation):

- Proposed amendments, if approved, to enable Ontario Power Generation (OPG) to establish and charge fees in its role as Financial Service Manager (FSM). It would also provide the methodology for the calculation of those fees and would define the role of the Ontario Energy Board (OEB) in reviewing and approving those fees.
- Proposed amendments, if approved, to enable the recovery of carrying costs and fees in a manner consistent with accounting requirements of OPG and the Independent Electricity System Operator (IESO).

While the Ministry of Energy and stakeholders did consider and develop additional amendments (i.e., to Ontario Regulation 429/04 and 195/17), external OPG and IESO accounting advisors confirm that amendments to Ontario Regulation 206/17 will be sufficient to satisfy accounting requirements.

No further amendments are being sought at this time.

Q. What is the timeline for when OPG intends to go to market? Why is OPG tracking to this timeline and how does the timeline for going to market relate to the overall delivery of this initiative?

Following the *Fair Hydro Act, 2017*, receiving Royal Assent on June 1, 2017, the Ministry of Energy, Ontario Power Generation, the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB) have been working to implement GA Refinancing.

For GA refinancing to proceed as planned under the legislation, OPG needs to go to market so that the GA deferral can be funded (i.e., so that the regulatory asset can be transferred to the OPG financing entity as set out in legislation). Until such time as this takes place, IESO must manage the GA deferral. It is therefore important that OPG proceed to market in timely fashion.

The Ministry of Energy understands OPG intends to go to market in November 2017. OPG is currently in preliminary discussion with rating agencies.

Any timeline is dependent on the completion of a number of related items including the confirmation of fees methodology, review and recovery of fees and carrying costs (i.e., as set out in the proposed amendments to Ontario Regulation 206/17).

Note: Since OEB adjusted rates to reflect Ontario's Fair Hydro Plan (OFHP) reductions partially on May 1, 2017 and fully on July 1, 2017, IESO has been managing a reduction in the GA received from electricity consumers.

PROPOSED ONTARIO REGULATION
made under the
ONTARIO FAIR HYDRO PLAN ACT, 2017
FEEES

Definitions

1. (1) In this Regulation,

“average monthly funding obligation” means, in respect of a month, the amount determined in accordance with subsection (2);

“average annual funding obligation” means, in respect of a year, the sum of the average monthly funding obligations for the year;

“funding tranche” means an issuance of funding obligations of a particular class or type, all of which have the same terms, but does not include an issuance of a funding obligation to the Financial Services Manager;

“market comparable fees” means fees, expressed as an annual percentage rate, charged by full-service managers of funds, including securitization vehicles, pension funds and other investment funds, hedge funds or other similar funds, in Canada or another jurisdiction in North America that is determined by the Board, for services that are similar to the services provided by the Financial Services Manager under the Act in terms of,

- (a) the type of services provided,
- (b) the scope of services provided,
- (c) the level of services provided, and
- (d) the dollar amount of assets under management;

“market comparable forecast interest rates” means, in relation to a funding tranche, interest rates for a debt obligation that,

- (a) has a principal amount that is comparable to the principal amount of the funding tranche,
- (b) has a term that is comparable to the term of the funding tranche,

- (c) is based on a type of instrument that is comparable to the type of instrument of the funding tranche,
- (d) has payment rights that are similar to the payment rights of the funding tranche, and
- (e) is issued by an issuer with a risk profile comparable to the risk profile of the financing entity issuing the funding tranche;

“net annual funding obligation” means, in respect of a year, the sum of the principal amounts of funding tranches issued in the year, other than any funding tranches that constitute a refinancing.

(2) For the purposes of determining the average monthly funding obligation for a month, the following formula applies:

$$(A + B) / 2$$

Where,

- A = the sum of the balances on the first day of the month of the principal amount of all outstanding funding obligations incurred by financing entities,
- B = the sum of the balances on the last day of the month of the principal amount of all outstanding funding obligations incurred by financing entities.

Fees that may be established, charged

2. (1) For the purposes of subsection 19 (3) of the Act, the fees established and charged by the Financial Services Manager may be charged to financing entities in relation to the establishment, management and administration of financing entities and the investment asset, including in relation to funding obligations incurred or that are planned to be incurred by the financing entities, and in relation to financing entities established or that are planned to be established.

(2) The Financial Services Manager shall not establish or charge any fees to financing entities other than those fees provided for under this Regulation.

GENERAL FEE FOR 2017

Submission re general fee for 2017

3. (1) The Financial Services Manager shall submit to the Board, on or before February 28, 2018, the proposed fee for the period beginning on June 1, 2017 and ending on December 31, 2017.

(2) The proposed fee shall be [\$3 million] plus the amount of any costs and expenditures incurred during the period mentioned in subsection (1) by the Financial Services Manager in relation to the establishment, management and administration of financing entities and the investment asset, including costs and expenditures,

ENE LSB note: OPG to confirm amount.

- (a) in relation to funding obligations incurred or that are planned to be incurred by the financing entities;
- (b) in relation to financing entities that are established or planned to be established;
- (c) on behalf of any financing entity in connection with the Financial Services Manager's duties under the Act in relation to the financing entity; or
- (d) incurred in relation to a management agreement between the Financial Services Manager and any financing entity, where the agreement provides for the reimbursement of the costs and expenditures.

(3) The costs and expenditures referred to in subsection (2) may include costs and expenditures in respect of the following:

1. Underwriters or selling agents for funding obligations.
2. Banking fees, including structuring fees or work fees.
3. Fees of issuing and paying agents for funding obligations.
4. Fees of trustees.
5. Fees incurred in the preparation of financial statements, financial reports, compliance certificates and tax returns.
6. Fees of legal counsel.
7. Rating agency fees.
8. Filing or registration fees.
9. Direct costs of the Financial Services Manager for employees whose work for the Financial Services Manager consists exclusively of the provision of the services described in subsection 2 (1) to financing entities.

(4) The submission shall include written confirmation from the Financial Services Manager's external auditor or another external auditor of the following:

1. That the amounts of the costs and expenditures that the Financial Services Manager seeks to recover through fees, as set out in the submission, are accurate.
2. That the amounts of the costs and expenditures, as set out in the submission, were incurred by the Financial Services Manager.
3. That, except in the case of amounts referred to in paragraph 9 of subsection (3), the amounts were paid or payable to third parties.

Board review of general fee for 2017

4. (1) The Board may,
 - (a) approve the fee proposed under section 3; or
 - (b) subject to subsection (2), refuse to approve all or a portion of the amount included in the proposed fee relating to any costs and expenditures and approve the remainder of the proposed fee.

(2) The Board may refuse to approve all or a portion of an amount relating to costs and expenditures if the Board is of the view that it was not incurred in relation to the establishment, management and administration of financing entities and the investment asset, including costs and expenditures described in clauses 3 (2) (a) to (d).

Charging of general fee for 2017

5. (1) If the Board approves a fee under section 4, the fee is payable no later than 30 days following the last day of the month following the month in which the Board's approval is given.
- (2) Where there is more than one financing entity, the portion of the fee allocated to and payable by a financing entity shall be based on a reasonable allocation as determined by the Financial Services Manager.

GENERAL FEE FOR JANUARY 1, 2018 TO MARCH 31, 2019

Submission re general fee for January 1, 2018 to March 31, 2019

6. (1) The Financial Services Manager shall submit to the Board, on or before December 15, 2017, the proposed fee for the period beginning on January 1, 2018 and ending on March 31, 2019.
- (2) The Financial Services Manager shall establish the proposed fee for the period mentioned in subsection (1) as follows:

1. Apply the following formula in respect of each funding tranche that forms part of the sum of the principal amounts of funding tranches issued in the period, other than any funding tranches that constitute a refinancing:

$$(A \times (B - C)) \times 0.10$$

Where,

A = the principal amount of the funding tranche,

B = the forecast interest rate for the funding tranche, and

C = the actual interest rate for the funding tranche.

2. Calculate the sum of the amounts determined by applying the formula under paragraph 1.
3. Calculate the amount that is 0.09375 per cent of the average monthly funding obligation for each month in the period mentioned in subsection (1).
4. Calculate the sum of the amount determined under paragraph 2 and the amounts determined under paragraph 3.

(3) Despite paragraph 1 of subsection (2), if the circumstances set out in Column 1 of the following Table apply during the period mentioned in subsection (1), the rules set out opposite those circumstances in Column 2 of the Table apply:

Item	Column 1 Circumstances	Column 2 Rules
1.	The sum of the average monthly funding obligations for the period is \$10 billion or less.	The result under paragraph 2 of subsection (2) shall be adjusted to an amount that is not more than 1 per cent of the amount that is 5 per cent of the sum of the principal amounts of funding tranches issued in the period, other than any funding tranches that constitute a refinancing. The result under paragraph 2 of subsection (2) shall be adjusted to an amount that is not less than -1per cent of the amount that is 5 per cent of the sum of the principal amounts of funding tranches issued in the period, other than any funding tranches that constitute a refinancing.
2.	The sum of the average monthly funding obligations for the period is greater than \$10 billion.	The result under paragraph 2 of subsection (2) shall be adjusted to an amount that is not more than 2 per cent of the amount that is 5 per cent of the sum of the principal amounts of funding tranches issued in the period, other than any funding tranches that constitute a refinancing. The result under paragraph 2 of subsection (2) shall be adjusted to an amount that is not less than -2 per cent of the amount that is 5 per cent of the sum of the principal amounts of funding tranches issued in the period, other than any funding tranches that constitute a refinancing.

(4) If, subsequent to the initial submission to the Board under subsection (1), the Financial Services Manager determines that a funding tranche may be issued that was not contemplated in the initial submission, the Financial Services Manager may notify the Board and submit a

forecast interest rate for that funding tranche later than November 15, 2017 but before such date as may be specified by the Board.

(5) The Board may, instead of specifying a date for the purposes of subsection (4), determine the forecast interest rate for the funding tranche, having regard to the forecast interest rates submitted by the Financial Services Manager for other funding tranches anticipated to be issued in the period.

Board review of general fee

7. (1) The Board may,

- (a) approve the fee proposed under section 6; or
- (b) refuse to approve the fee if the Board is of the view that any forecast interest rate used for the purposes of paragraph 1 of subsection 6 (2) is materially inconsistent with market comparable forecast interest rates.

(2) If the Board refuses to approve the proposed fee,

- (a) the Board may make recommendations to the Financial Services Manager regarding each forecast interest rate that the Board found was inconsistent with market comparable forecast interest rates; and
- (b) the Financial Services Manager shall submit to the Board,
 - (i) a revised proposed fee that takes into consideration the recommendations of the Board, if any, and
 - (ii) a description of the methodology that the Financial Services Manager has applied to determine revised forecast interest rates for each funding tranche in respect of which the Board found an inconsistency with market comparable forecast interest rates.

(3) If the Financial Services Manager submits a revised proposed fee, this Regulation applies, with necessary modifications, to the submission as if it were the initial submission.

Charging of general fee

8. (1) If the Board approves a fee under section 7,

- (a) subject to subsection (2), each monthly amount determined under paragraph 3 of subsection 6 (2) is payable no later than the last day of the month following the month in respect of which the amount was determined; and

- (b) all other amounts are payable no later than 30 days following the later of March 31, 2019 and the last day of the month in which the Board's approval is given.

(2) If the Board approves a fee under section 7 after January 1, 2018, each of the monthly amounts referred to in clause (1) (a) is payable no later than the later of,

- (a) the last day of the month following the month in respect of which the amount was determined; and
- (b) the last day of the month following the month in which the Board's approval is given.

(3) Where there is more than one financing entity, the portion of the fee allocated to and payable by a financing entity shall be based on a reasonable allocation as determined by the Financial Services Manager.

FEE FOR APRIL 1, 2019 TO MARCH 31, 2020 AND SUBSEQUENT YEARS

Submission re base and variable fees for 2019-2020, subsequent years

9. (1) The Financial Services Manager shall submit to the Board, on or before February 28, 2019 and on or before February 28 in each subsequent year, the proposed base fee and variable fee for the period beginning on April 1 in the year of the submission and ending on March 31 in the following year.

(2) In this section and sections 10 to 13, a reference to a "year" means the 12-month period beginning on April 1 and ending on the following March 31.

Base fee

10. (1) The Financial Services Manager shall establish a proposed base fee mentioned in subsection 9 (1) for each month in a year by determining the amount that it considers to be consistent with market comparable fees, expressed as a percentage of the average monthly funding obligation for the preceding month.

(1.1) The Financial Services Manager shall determine the amount that it considers to be consistent with market comparable fees by applying the following rules:

1. Subject to paragraph 2, the Financial Services Manager shall determine the average of at least five fees that satisfy the definition of "market comparable fee" in subsection 1 (1).
2. If the Financial Services Manager is not able to determine the average of five fees for the purposes of paragraph 1, the Financial Services Manager shall determine the average of as many fees as possible.

3. Subject to paragraph 4, the Financial Services Manager shall ensure that at least 80 per cent of the fees included in the average are fees charged by full-service managers of securitization vehicles.
4. If the Financial Services Manager is not able to ensure that at least 80 per cent of the fees meet the description set out in paragraph 2, the Financial Services Manager shall ensure that the highest percentage possible of the fees included in the average meets that description.

(2) The Board may,

- (a) approve the proposed base fee; or
- (b) subject to subsection (3), refuse to approve the proposed base fee if the Board is of the view that the proposed base fee is materially inconsistent with market comparable fees.

(3) When determining whether the proposed base fee is materially inconsistent with market comparable fees, the Board shall apply the rules set out in subsection (1.1).

(4) If the Board refuses to approve a proposed base fee,

- (a) the Board may make recommendations to the Financial Services Manager regarding the determination of a base fee that is consistent with market comparable fees; and
- (b) the Financial Services Manager shall submit to the Board,
 - (i) a revised proposed base fee that takes into consideration the recommendations of the Board, if any, and
 - (ii) a description of the methodology that the Financial Services Manager has applied to determine the revised proposed base fee, including details concerning the market comparable fees that the Financial Services Manager considered.

(5) If the Financial Services Manager submits a revised proposed fee, this section applies, with necessary modifications, to the submission as if it were the initial submission.

(6) If the Board has not approved a proposed base fee by the first day of the year for which the proposed base fee would be charged,

- (a) the Financial Services Manager may continue to charge the base fee that was most recently approved by the Board, if any base fee was previously approved; and

- (b) the Financial Services Manager shall adjust the base fee in the month following the month in which the Board approves the proposed base fee, to reflect the difference between the base fee charged to date and the base fee approved by the Board for the year to date.

Variable fee

11. (1) The Financial Services Manager shall establish a variable fee mentioned in subsection 9 (1) for a year as follows:

1. Subject to subsection (2), apply the following formula in respect of each funding tranche that forms part of the net annual funding obligation for the year:

$$(A \times (B - C)) \times 0.10$$

Where,

A = the principal amount of the funding tranche,

B = the forecast interest rate for the funding tranche, and

C = the actual interest rate for the funding tranche.

2. Calculate the sum of the amounts determined by applying the formula under paragraph 1.

(2) If the circumstances set out in Column 1 of the following Table apply in a year, the variable fee payable for a year is subject to the rules set out opposite those circumstances in Column 2 of the Table:

Item	Column 1 Circumstances	Column 2 Rules
1.	The average annual funding obligations are \$10 billion or less.	The variable fee payable for the year shall not be more than 1 per cent of the amount that is 5 per cent of the net annual funding obligation for the year. The variable fee payable for the year shall not be less than -1 per cent of the amount that is 5 per cent of the net annual funding obligation.
2.	The average annual funding obligations are greater than \$10 billion.	The variable fee payable for the year shall not be more than 2 per cent of the amount that is 5 per cent of the net annual funding obligation for the year. The variable fee payable for the year shall not be less than -2 per cent of the amount that is 5 per cent of the net annual funding obligation for the year.

(3) The Board may,

- (a) approve the proposed variable fee; or

- (b) refuse to approve a proposed variable fee if the Board is of the view that any forecast interest rate used for the purposes of subsection (1) is materially inconsistent with market comparable forecast interest rates.

(4) If the Board refuses to approve the proposed variable fee,

- (a) the Board may make recommendations to the Financial Services Manager regarding each forecast interest rate that the Board found was inconsistent with market comparable forecast interest rates; and
- (b) the Financial Services Manager shall submit to the Board,
 - (i) a revised proposed fee that takes into consideration the recommendations of the Board, if any, and
 - (ii) a description of the methodology that the Financial Services Manager has applied to determine revised forecast interest rates for each funding tranche in respect of which the Board found an inconsistency with market comparable forecast interest rates.

(5) If, subsequent to the initial submission to the Board in respect of a year, the Financial Services Manager determines that a funding tranche that was not contemplated in the initial submission, the Financial Services Manager may notify the Board and submit a forecast interest rate for that funding tranche later than February 28 but before such date as may be specified by the Board.

(6) The Board may, instead of specifying a date for the purposes of subsection (5), determine the forecast interest rate for the funding tranche, having regard to the forecast interest rates submitted by the Financial Services Manager for other funding tranches anticipated to be issued in the applicable year.

In-year amendments to base fee or variable fee

12. (1) The Financial Services Manager may, no more frequently than once in any consecutive twelve month period, make submissions to the Board to amend any fees approved by the Board under section 10 or 11, and section 10 or 11 apply, as the case may be and with necessary modifications, in respect of the submissions.

(2) Nothing in subsection (1) authorizes an amendment to a fee that would result in the fee failing to meet the criteria for approval set out in section 10 or 11, as the case may be.

(3) If the Board approves an amendment to a fee under subsection (1), the fee as amended may be charged,

- (a) in the case of a base fee, starting in the month following the month in which the Board's approval is given; and
- (b) in the case of a variable fee, in respect of funding tranches issued starting in the month following the month in which the Board's approval is given.

Charging of base and variable fees

13. (1) If the Board approves a fee under section 10 or 11,

- (a) in the case of a base fee, subject to subsection (1.1), the fee is payable no later than 30 days after the end of the month for which the fee is payable; and
- (b) in the case of a variable fee for a year, on the last day of the third month in the following year.

(1.1) If the Board approves a fee under section 10 after March 31, 2019, each of the monthly amounts referred to in clause (1) (a) is payable no later than the later of,

- (a) the last day of the month following the month in respect of which the amount was determined; and
- (b) the last day of the month following the month in which the Board's approval is given.

(2) If the variable fee for a year is a negative amount, it shall be deducted from the first payments of base fees payable in the following year until the amount has been fully deducted.

(3) Where there is more than one financing entity, the portion of the fees allocated to and payable by a financing entity shall be based on,

- (a) in the case of a base fee, the financing entity's proportionate share of the average principal amount of funding obligations for the applicable period; and
- (b) in the case of a variable fee, the portion of the variable fee attributable to the funding tranches issued by the financing entity.

FEES FOR COSTS AND EXPENDITURES

Fees for costs and expenditures, submission to Board

14. (1) The Financial Services Manager shall submit to the Board a proposed fee for costs and expenditures,

- (a) no later than March 31, 2019, in respect of costs and expenditures incurred during 2018; and

- (b) no later than March 31 in each subsequent year, in respect of costs and expenditures incurred during the previous calendar year.

(2) The fee may be established to recover the amount of costs and expenditures incurred by the Financial Services Manager in relation to the establishment, management and administration of financing entities and the investment asset, including costs and expenditures,

- (a) in relation to funding obligations incurred or that are planned to be incurred by the financing entities;
- (b) in relation to financing entities that are established or planned to be established;
- (c) on behalf of any financing entity in connection with the Financial Services Manager's duties under the Act in relation to the financing entity; or
- (d) incurred in relation to a management agreement between the Financial Services Manager and any financing entity, where the agreement provides for the reimbursement of the costs and expenditures.

(3) The costs and expenditures referred to in subsection (2) may include costs and expenditures in respect of the following:

1. Underwriters or selling agents for funding obligations.
2. Banking fees, including structuring fees or work fees.
3. Fees of issuing and paying agents for funding obligations.
4. Fees of trustees.
5. Fees incurred in the preparation of financial statements, financial reports, compliance certificates and tax returns.
6. Fees of legal counsel.
7. Rating agency fees.
8. Filing or registration fees.
9. Subject to subsection (4), direct costs of the Financial Services Manager for employees whose work for the Financial Services Manager consists exclusively of the provision of the services described in subsection 2 (1) to financing entities.

(4) Costs referred to in paragraph 9 of subsection (3) are recoverable as costs only if the Board, upon reviewing the submission, determines that those costs as set out in the submission are consistent with the costs recovered by the majority of [full-service? managers] who recover similar costs from persons who are also charged fees in the fiscal year starting in the calendar year to which the submission relates.

(5) The submission shall include written confirmation from the Financial Services Manager's external auditor or another external auditor of the following:

1. That the amounts of the costs and expenditures that the Financial Services Manager seeks to recover through fees, as set out in the submission, are accurate.
2. That the amounts of the costs and expenditures, as set out in the submission, were incurred by the Financial Services Manager.
3. That, except in the case of amounts referred to in paragraph 9 of subsection (3), the amounts were paid or payable to third parties.

Board review of fee for costs, expenditures

15. (1) The Board may,

- (a) approve the fee proposed under subsection 14 (1);
- (b) subject to subsection (2) refuse to approve all or a portion of the amount included in the proposed fee relating to any costs and expenditures and approve the remainder of the proposed fee.

(2) The Board may refuse to approve all or a portion of an amount relating to costs and expenditures if the Board is of the view that it was not incurred in relation to the establishment, management and administration of financing entities and the investment asset, including costs and expenditures described in clauses 14 (2) (a) to (d).

Charging of fee for costs, expenditures

16. (1) If the Board approves a fee under section 15, the fee is payable no later than 30 days following the last day of the month following the Board's approval.

(2) Where there is more than one financing entity, the portion of the fee allocated to and payable by a financing entity shall be based on a reasonable allocation as determined by the Financial Services Manager.

Commencement

17. **This Regulation comes into force on the day it is filed.**

RESPONSE TABLE

Issue/Consideration	Strategy	Key Messages
Pension Asset Accounting: Auditor General's qualified opinion	Confirm that the province will continue to follow PSAS, as always, and seek appropriate expert guidance where PSAS is silent. Highlight supporting perspectives from external consultants.	The government continues to move forward and present the province's finances fairly and accurately and in accordance with Canadian Public Sector Accounting Standards (PSAS). The government respectfully disagrees with the Auditor General's interpretation of the accounting standards, as PSAS neither requires unilateral control to record an asset, nor does it include a requirement to obtain a letter from the co-sponsor of the plan agreeing to reduce further contributions within 12 months. The government is open to continue to discuss the matter in hopes of resolving this matter.
IESO Accounting: 1) Market Asset Accounts 2) Rate-Regulated Accounting 3) AG to audit IESO's 2017 statements 4) OPG/IESO "inappropriate expenses" 5) Peripheral: OPG Executive Compensation	Confirm that the province will continue to follow PSAS, as always, and seek appropriate expert guidance where PSAS is silent. Re-iterate government's appreciation of the Auditor General's independent review and the IESO's recent unqualified audit record.	The government welcomes the Auditor General's independent review and remains committed to assisting her office in providing its views to the Legislative Assembly. IESO's recent accounting changes are supported by the IESO's audit committee, board of directors, its independent external auditor, and by the Office of the Provincial Controller. The IESO prepares its financial statements in accordance with PSAS, and received an unqualified, or clean, audit opinion on its 2016 financial statements.
Ontario's Fair Hydro Plan (OFHP) Accounting: "convenient/inappropriate accounting"	Highlight due diligence included in OFHP decision making, ~~and that the accounting structure is still being finalized.~~ Refuse to speculate about AG's	<u>As part of Ontario's Fair Hydro Plan, bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of</u>

EXAMPLE

STANDING COMMITTEE ON PUBLIC ACCOUNTS
Chapter 2, Public Accounts of the Province
February 2018

	potential future audit opinion. Emphasize that the province will continue to follow PSAS, as always, and seek appropriate expert guidance where PSAS is silent.	<u>electricity ratepayers who will benefit from them.</u> <u>Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base.</u> <u>Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.</u> <u>Ontario Power Generation (OPG) was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations. OPG has the necessary expertise to assist with refinancing the GA and will ensure that it is done efficiently and cost-effectively.</u> <u>OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with PSAS and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.</u> <u>In developing the policy, the government considered a range of implementation options. Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks and take necessary actions to meet the mandate.</u> <u>The government also consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.</u> The province will continue to prepare its consolidated financial statements in accordance with <u>Public Sector Accounting Standards (PSAS)-PSAS.</u> <u>The proposed accounting for the Ontario Fair Hydro Plan (OFHP) reflects the economic substance of the transaction by differentiating</u>

EXAMPLE

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

		<u>costs borne by taxpayers versus those borne by ratepayers.</u> PSAS is silent on a key accounting issue regarding the OFHP – the standards neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities. In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards. <u>In this case, the IESO consulted US GAAP, the accounting framework in North America that provides the most developed guidance on rate regulated operations.</u> <u>The professional staff has appropriately applied this guidance in assessing the accounting for the Ontario Fair Hydro Plan.</u>
Pre-Election Report: “government should publicly communicate if and when”	Re-iterate the government's commitment to working with the Office of the Auditor General. Confirm that the government will, as always, continue to follow the relevant legislation.	Under the <i>Fiscal Transparency and Accountability Act, 2004</i>, the government may file a regulation that would require it to release a Pre-Election Report on Ontario's Finances. Should the government file such a regulation, the Auditor General would be required to issue a statement based on a prompt review following the release of such a Pre-Election Report. The government remains committed to meeting the legislative requirements of the Act, and working constructively with the Auditor General.
Debt Reduction Plan: “Ontario has the highest sub-sovereign debt in the world”	Re-iterate government's track record of responsible fiscal management and provide high-level overview of debt reduction plan.	The government's long-term infrastructure plan to invest about \$190 billion over 13 years, starting in 2014-15, will contribute to the growth of the economy. The Centre for Spatial Economics found that for every \$1 spent on public infrastructure, GDP increases by up to \$6, on average, in the long term.
“Legislated Accounting”	Emphasize that the province will continue to follow PSAS, as always, and seek appropriate expert guidance where PSAS is silent.	The <i>Ontario Fair Hydro Plan Act, 2017</i> and its related regulations do not create accounting rules or legislate the accounting. It is important to distinguish legislating the accounting from legislating the right of the government to recover amounts from specified

Commented [AL1]: Concept covered above

EXAMPLE

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

	Provide example of the only time legislated accounting was used; explain how OFHP does not legislate accounting.	ratepayers in the future, which in the absence of legislation, would have been collected from specified ratepayers as the costs were incurred. The province, as always, will prepare its consolidated financial statements in accordance with PSAS, including the transactions resulting from Ontario's Fair Hydro Plan.
Use of External Advisors: Perception that the government looks to external advisors to circumvent the Auditor General	Confirm that the province seeks external expertise when appropriate as a normal course of business.	The government's use of external expertise for accounting and financial reporting matters supplements its own resources on complex or emerging accounting and reporting matters. External advisors are generally engaged to provide advice and guidance to supplement internal analysis, and in the normal course of business.

Ministry of Energy – Proposed Friendly Questions:

1. To the Deputy Minister of Energy, why is keeping the financing costs of Ontario's Fair Hydro Plan (OFHP) on the rate-base, as opposed to the tax-base appropriate?

And, why is Ontario Power Generation (OPG) best placed to minimize the cost of the overall program from your perspective?

Policy Objectives of Ontario's Fair Hydro Plan

Over the last decade Ontario has rebuilt our transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP has introduced new measures to lower electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

Refinancing the Global Adjustment (GA) is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system—the rate base—not the tax base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

Over the last decade Ontario has rebuilt our transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. Prices have

Formatted: No Spacing, Indent: Left: 0.63 cm, Space After: 0 pt, Line spacing: single

Commented [AL1]: Moved down for organizational flow

Formatted: Font: 12 pt

Formatted: Indent: Left: 0.63 cm

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

~~increased because our energy system is being transformed — more than \$70 billion has been invested to modernize the electricity system.~~

~~The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.~~

~~But we asked one generation — today's generation — to unfairly shoulder the burden of a large portion of those costs. We had to play catch-up and we asked today's ratepayers to cover nearly the whole tab.~~

~~The government heard from Ontarians across the province that the costs of these new investments have grown too quickly, which is why we have moved forward with a plan that would ensure costs are shared more evenly over the years ahead.~~

~~To address the impact of our electricity system investments on relieve the current burden on consumers, the following two streams of initiatives where are being are being undertaken.~~

~~First, in the early years, a portion of Global Adjustment (GA) costs will be being refinanced to reduce pressure on today's electricity consumers. In later years, the cost of financing will be recovered from consumers.~~

~~Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.~~

~~Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.~~

~~Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system — the rate-base — not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.~~

Formatted: Indent: Left: 0.63 cm

Formatted: Indent: Left: 0.63 cm

Commented [AL2]: Moved down for organizational flow

Formatted: Font: 12 pt

Formatted: English (Canada)

Formatted: No Spacing, Indent: Left: 0.63 cm, Space After: 0 pt, Line spacing: single

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

~~Under initial government forecasts, the immediate reduction in the GA was about \$2.5 billion per year on average over the first 10 years, with annual interest costs not exceeding \$1.4 billion.~~

Second, ~~the~~ the province has introduced rate relief programs and expanded existing ones.

In addition, ~~A~~a number of important programs such as the Ontario Electricity Support Program (OESP) and the Rural or Remote Rate Protection (RRRP) program ~~will~~are now ~~be~~-funded from provincial revenues instead of by electricity consumers (i.e., from the rate-base).

The province has also launched a new Affordability Fund, ~~enhancing~~ the existing OESP, and is providing on-reserve First Nations with a delivery credit. ~~Combined, these new measures would cost the government up to \$2.5 billion over the next three years.~~

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Development of OFHP

Formatted: No Spacing, Indent: Left: 0.63 cm, Space After: 0 pt, Line spacing: single

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: English (United Kingdom)

Commented [AL3]: Moved up for organizational flow

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options. Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks and take necessary actions to meet the mandate.

The senior officials and staff included:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

The government also consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed. This is normal course of business governments take for complex transactions.

Role of Ontario Power Generation (OPG)

With respect to OPG, it was identified as the Financial Services Manager (FSM) responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations associated with GA refinancing. Financing requirements are determined by the legislation and will be funded through the Trust.

OPG is uniquely positioned to be the FSM, it understands the characteristics of the market, regularly interacts with the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO).

OPG has extensive experience in the Ontario energy market, capital markets, regulation and fund management and will ensure that the refinancing will be done in the most efficient and cost-effective manner.

OPG currently manages approximately \$20 billion in nuclear funds through the Decommissioning Segregated Fund and the *Used Fuel Segregated Fund* to manage nuclear liabilities, \$15 billion in pension funds and is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience in regulatory deferral and variance accounts.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

In addition to executing hundreds of millions in project financing over the past several years, OPG completed its first bond offering in the Canadian public market with \$500 million unsecured 10-year bonds in October 2017.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that comprises the target market for financing Ontario's Fair Hydro Plan initiative. For example, the Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors, including major investors in the Canadian power and utility bonds markets.

Ontario Power Generation has a strong track record of producing high-quality financial reports on a timely basis. In addition, OPG will report on the activities of the Fair Hydro Trust in its quarterly financial reporting. The Fair Hydro Trust will be reported as a separate segment in these public documents

In terms of administration, OPG is currently managing its own corporate public debt program, three project financing programs totaling more than \$2 billion and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

As the implementation of the financing program progresses, focus has remained on minimizing costs to ratepayers. Particular attention has been given to achieving a strong credit rating for the Trust, with the objective of mitigating the impact to ratepayers through effective market pricing of the funds being borrowed by the Trust.

OFHP is delivering much-needed rate relief to electricity consumers. The policy decisions we have made in implementing GA refinancing, in consultation with third-party experts, senior officials and staff from across government, most effectively achieve the policy goals of the refinancing program and ensure that the cost of important investments in the electricity system are allocated fairly amongst electricity consumers in proportion to the benefit from received from them.

2. **To Independent Electricity System Operator (IESO), how did IESO come to the conclusion that it was acceptable to use US Generally Accepted Accounting Principles (GAAP) instead of Public Sector Accounting Standards (PSAS) for rate regulated activities?**

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

And, is there a clause or section of PSAS that permits the use of GAAP in a given scenario?

Response

Independent Electricity System Operator's Approach to Accounting

The Independent Electricity System Operator (IESO) follows Public Sector Accounting Standards (PSAS) for its accounting.

The PSAS neither explicitly permits, nor prohibits, the recognition, measurement, presentation or disclosure of rate-regulated activities. In absence of a clear position on an issue, standard accounting practice dictates that an entity is entitled to consult another accounting standard. If I may cite from the PSAS Handbook, Section 1150.18 and 19:

"Paragraphs PS 1150.19-.24 identify some of the other sources that a public sector reporting entity might consult to assist in selecting accounting policies and disclosures that comply with paragraph PS 1150.05. Pronouncements issued by other bodies authorized to issue accounting standards may be useful sources to consult.

For example, accounting pronouncements published with the authority of the Canadian Accounting Standards Board (AcSB), International Accounting Standards Board (IASB), US Federal Accounting Standards Advisory Board (FASAB), US Governmental Accounting Standards Board (GASB), or International Public Sector Accounting Standards Board (IPSASB) are often important sources to consult on matters not covered by primary sources of GAAP or for assistance in applying a primary source of GAAP to specific circumstances."

In this case, IESO consulted US GAAP, the only accounting framework in North America that provides guidance on rate regulated operations. The IESO has since adopted aspects of the US GAAP accounting framework allowing IESO to recognize a regulatory asset.

This decision was supported by an accounting opinion from our external auditors at KPMG and aligns IESO with six of the eight other independent system operators in North America.

It's a decision IESO made after careful consideration and extensive consultation with external experts. In fact, more than one of the big-four accounting firms agree with our decision on this matter. The IESO regularly reviews its accounting policies to ensure our financial reporting best represents our operations and the substance of the accounts we oversee.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

Prompted by conversation with government about Ontario's Fair Hydro Plan (OFHP) and recognizing the need to consider impacts of future government policy, IESO revisited its options for reporting market accounts and recognizing regulatory assets.

Working with its audit partner KPMG, IESO determined that there were reporting options for market accounts and regulatory assets and that a choice was required as to whether or not to report these in IESO financial statements.

By analyzing the nature of the accounts, IESO's economic relationship to them, legislative requirements and market rules it was concluded that an appropriate position for either treatment was acceptable.

Organizations in Other Jurisdictions

When we started looking into changes to our accounting policies, we wanted to look at other organizations that have similar mandates to us.

Including IESO, there are 9 independent system operators in North America; seven in the U.S. and two in Canada: The IESO and Alberta's AESO.

We had discussions with these organizations about their operations and accounting practices.

We looked at their location, the accounting framework they follow, the type of organization they are (either not-for-profit or otherwise), whether they are subject to income tax, their capital structure, how they are governed, by which body they are regulated, and finally, whether they recognized balances of market participants and regulatory assets in their financial reporting.

From this research, we found that 7 of the other 8 ISOs recognize the balances of the market participants. They are:

1. **ISO New England;**
2. **NYISO**, in New York;
3. **MISO**, Midcontinent ISO which covers Midwest United States, Manitoba, and much of Arkansas, Mississippi and Louisiana;
4. **PJM**, covering the eastern U.S. states: Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia;
5. **CAISO**, in California;
6. **ERCOT**, in Texas; and

7. **Southwest Power Pool**, in central US.

When we talked to our counterparts across North America about regulatory assets, we found out that 6 of the other 8 entities recognize the economic effects of rate regulation, they are:

1. **AESO**, in Alberta;
2. ISO New England;
3. NYISO;
4. MISO;
5. PJM; and
6. ERCOT.

I should mention that the two ISOs that do not recognize the effect of rate regulation are California ISO (CAISO) and Southwest Power Pool (SPP).

When we talked to CAISO, we found out that their accounting framework actually allows for the recognition of regulatory assets and liabilities, but that it had concluded the need to recognize regulatory assets was no longer necessary.

When we talked to Southwest Power Pool, we learned that they simply do not have any variance accounts that would qualify as regulatory assets or liabilities.

So, when we looked at making the accounting change we considered that:

1. Including **market accounts** on our financial statements would provide increased transparency into the value of transactions that flow through Ontario's \$17 billion electricity market;
2. That **regulatory accounting** better reflected the economic substance of certain types of IESO expenses (like Smart Metering Entity expenses) which are recovered through a rate regulated by the OEB;
3. That the change would **enhance the relevance, transparency and accountability of our financial reporting**;
4. That this change would **bring IESO in line with its peers** across North America; and
5. Finally, that this accounting change would in **no way affect IESO's costs, or have any financial impact on electricity ratepayers** – all these factors confirmed our decision to make the accounting change.

Ultimately, IESO felt the public reporting of market accounts was relevant to the needs of its financial statement users and enabled greater transparency into the market transactions it oversees, which amounted to \$17 billion last year.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

We also felt that recognizing regulatory assets would provide more transparency into the substance of the variance accounts we oversee.

As we just covered, this change to recognize regulated assets and market accounts brings IESO in line with accounting practices followed by other independent system operators in North America.

I should also mention, that in the past, the Ontario Power Authority, a predecessor organization of IESO, reported a subset of the market accounts on its financial statements – so this isn't new.

Role of an Independent Audit Firm

To confirm our view that the change was appropriate, IESO engaged independent audit firm KPMG for accounting research on the matter.

KPMG conducted its own research into the issue. KPMG subsequently issued a white paper on the accounting change, supporting IESO's decision to change its accounting policy. The changes were also reviewed with and supported by the Office of the Provincial Controller.

The accounting change was reviewed by IESO's Board of Directors, and approved.

As part of our regular 2016 year-end audit, KPMG issued an accounting opinion on our financial reporting. The accounting firm issued an unqualified or "clean" accounting opinion, meaning they supported the decision.

Finally, when publishing our 2016 financial statements, in order to communicate the change of accounting policy, IESO added additional notes in its 2016 financial statements to explain the changes in the Summary of Significant Accounting Policies section of its 2016 annual report.

These changes in no way affect IESO's costs, or have any financial impact on electricity ratepayers.

Ultimately, IESO made these changes because it will provide the users of its financial statements greater transparency into the market transactions it oversees, which amounted to \$17 billion last year, and better reflects the economic substance of IESO expenses that are recovered through rate-regulation.

It is KPMG's responsibility to express an opinion on the financial statements based on their audit.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

In our case, KPMG conducted their audit in accordance with Canadian generally accepted accounting standards.

Those accounting standards require that the auditors comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the entity's financial statements are free from material misstatement.

Here are some of the things an audit looks into:

- An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements.
- The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.
- In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.

In addition, an audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

In IESO's 2016 financial statements, KPMG stated: "We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion".

This was followed by a statement of their unqualified opinion:

- In our opinion, the financial statements present fairly, in all material respects, the financial position of IESO as at December 31, 2016, and its results of operations and the changes in its new debt and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

This is taken directly from our 2016 financial statements, which are publically available.

So the "unqualified opinion" is basically accounting-speak to say that the audit partner undertook the thorough audit process, applied the appropriate standards and believes the financial statements follow the appropriate accounting standard and fairly and accurately represent IESO's financial position at year-end.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

KPMG also found that US GAAP was an appropriate accounting framework to look to for guidance on rate-regulated operations, since PSAS was silent on the issue. And that regulatory assets under ASC 980 is not an exemption from the application of US GAAP.

Finally, KPMG's research also found that the accounting change would bring IESO in line with the majority of its ISO peers across North America.

When we considered the results of our own and KPMG's research, along with the fact that the change would have no impact on IESO's costs, or have any financial impact on electricity ratepayers, we went ahead and made the accounting change.

3. To Ontario Power Generation (OPG), can you explain what sort of external expertise OPG enlisted?

And, can you explain what counsel these experts provided with respect to the structure that has been set up and the accounting that will be used?

Response

Ontario Power Generation's Qualifications

Let me make a few remarks about Ontario Power Generation's (OPG) qualifications as the financing manager of Ontario's Fair Hydro Plan.

OPG currently manages a \$20 billion nuclear fund and \$15 billion in pension funds and as an entity regulated by the Ontario Energy Board (OEB), OPG also has extensive experience with regulatory deferral and variance accounts.

In addition, OPG has the breadth and demonstrated track record in the financial markets including the highly successful inaugural public debt offering earlier in October, private placement of insurance linked bonds, participation in securitization programs, and the very successful project debt issuances tied to new hydroelectric developments.

These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these financing structures have resulted in international recognition.

OPG has also developed solid investor relationships and has a large investor base in the structured finance space who would be the target market for financing Ontario's Fair Hydro Plan initiative.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

For example, the Lower Mattagami project financing attracted a broad investor base of about 80 institutional investors, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt and three project financing programs totaling more than \$2 billion, as well as two commercial paper programs.

Role of Ontario Power Generation as the Finance Service Manager

OPG is acting as the Finance Service Manager (FSM) as prescribed under the Ontario Fair Hydro legislation, assigned to develop the financing plans and manage the Fair Hydro Trust, which manages the debt obligations associated with Global Adjustment (GA) refinancing.

In December we set up the Fair Hydro Trust, which is ring fenced from the generation activities of OPG in an effort to reflect the unique nature of this business and not co-mingle the operational activities of the two businesses.

The financing requirements are determined by the legislation and the reduction in consumers' bills, and are funded through the Trust.

OPG is responsible for arranging for third party debt to finance the purchase of the regulatory asset from IESO. This funding will be supplemented by both the Province and OPG.

- The first tranche of public debt was issued in early February 2018.
- The Trust will continue to borrow funds through the debt markets 3-4 times each year to purchase assets from Independent Electricity System Operator (IESO).

OPG is uniquely positioned to be the financing manager of Ontario's Fair Hydro Plan as we understand the supply and demand characteristics of the market. As previously mentioned, we regularly interact with the Ontario Energy Board (OEB) and the IESO, and we have experience in Treasury operations in the marketplace including relationships with credit rating agencies.

There are three specific areas that we supplemented our team with external resources.

- First, was legal advice to ensure there is clear alignment between the legislation and the Trust and its related requirements and obligations.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

- The second was financing advice directed at the capital markets again to ensure alignment with the markets focused on achieving the most cost effective financing to ensure the rate payer impact is minimized.
- The third was accounting advice directed at the set up and governance of the Trust and then to achieve the transparency in reporting that is critical.

Greater Transparency

As has been mentioned OPG has strong capabilities across these areas, but felt it was prudent to ensure that all steps are taken to establish the Trust and its activities in a clear and transparent manner.

The structure that has been set up in fact ensures a high level of transparency.

As these deferred amounts are funded through third party financing, the process by design in financial market space requires disclosure and oversight including credit rating agencies, the OEB, external audit of the Trust itself, additional OPG disclosure in its reports, oversight from lenders through Trust indenture documents.

Ratepayers and taxpayers will be able to clearly see the financial results of the Trust as it relates to the legislation.

Due to OPG's ownership and control over the key activities of the OPG's Fair Hydro Trust, OPG will consolidate the financial results of the Trust in accordance with US GAAP.

OPG will report the financial results of the Trust's operations as part of its regular quarterly and annual reporting process, beginning in March 2018.

The Trust's activities will be clearly reported as a separate segment in OPG's overall results.

OPG's financial reports are audited (currently by ERNST & Young) and filed with the Ontario Securities Commission (OSC) and subject to OSC oversight and a public news release is always issued when the reports are filed.

Ministry of Energy – Proposed Friendly Questions:

1. To the Deputy Minister of Energy, why is keeping the financing costs of Ontario's Fair Hydro Plan (OFHP) on the rate-base, as opposed to the tax-base appropriate?

And, why is Ontario Power Generation (OPG) best placed to minimize the cost of the overall program from your perspective?

Policy Objectives of Ontario's Fair Hydro Plan

Over the last decade Ontario has rebuilt our transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP has introduced new measures to lower electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

Refinancing the Global Adjustment (GA) is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system—the rate base—not the tax base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

Over the last decade Ontario has rebuilt our transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. Prices have increased

Formatted: No Spacing, Indent: Left: 0.63 cm, Space After: 0 pt, Line spacing: single

Commented [AL1]: Moved down for organizational flow

Formatted: Font: 12 pt

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

~~because our energy system is being transformed—more than \$70 billion has been invested to modernize the electricity system.~~

~~The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.~~

~~But we asked one generation—today's generation—to unfairly shoulder the burden of a large portion of those costs. We had to play catch-up and we asked today's ratepayers to cover nearly the whole tab.~~

~~The government heard from Ontarians across the province that the costs of these new investments have grown too quickly, which is why we have moved forward with a plan that would ensure costs are shared more evenly over the years ahead.~~

~~To address the impact of our electricity system investments on relieve the current burden on consumers, the following two streams of initiatives where are being are being undertaken.~~

~~First, in the early years, a portion of Global Adjustment (GA) costs will be being refinanced to reduce pressure on today's electricity consumers. In later years, the cost of financing will be recovered from consumers.~~

~~Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.~~

~~Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.~~

~~Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.~~

Formatted: Indent: Left: 0.63 cm

Formatted: Indent: Left: 0.63 cm

Commented [AL2]: Moved down for organizational flow

Formatted: Font: 12 pt

Formatted: English (Canada)

Formatted: No Spacing, Indent: Left: 0.63 cm, Space After: 0 pt, Line spacing: single

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

~~Under initial government forecasts, the immediate reduction in the GA was about \$2.5 billion per year on average over the first 10 years, with annual interest costs not exceeding \$1.4 billion.~~

Second, the province has introduced rate relief programs and expanded existing ones.

In addition, a number of important programs such as the Ontario Electricity Support Program (OESP) and the Rural or Remote Rate Protection (RRRP) program will now be funded from provincial revenues instead of by electricity consumers (i.e., from the rate-base).

The province has also launched a new Affordability Fund, enhancing the existing OESP, and is providing on-reserve First Nations with a delivery credit. Combined, these new measures would cost the government up to \$2.5 billion over the next three years.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Development of OFHP

Formatted: No Spacing, Indent: Left: 0.63 cm, Space After: 0 pt, Line spacing: single

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: English (United Kingdom)

Commented [AL3]: Moved up for organizational flow

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options. Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks and take necessary actions to meet the mandate.

The senior officials and staff included:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

The government also consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed. This is normal course of business governments take for complex transactions.

Role of Ontario Power Generation (OPG)

With respect to OPG, it was identified as the Financial Services Manager (FSM) responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations associated with GA refinancing. Financing requirements are determined by the legislation and will be funded through the Trust.

OPG is uniquely positioned to be the FSM, it understands the characteristics of the market, regularly interacts with the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO).

OPG has extensive experience in the Ontario energy market, capital markets, regulation and fund management and will ensure that the refinancing will be done in the most efficient and cost-effective manner.

OPG currently manages approximately \$20 billion in nuclear funds through the Decommissioning Segregated Fund and the *Used Fuel Segregated Fund* to manage nuclear liabilities, \$15 billion in pension funds and is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience in regulatory deferral and variance accounts.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new

STANDING COMMITTEE ON PUBLIC ACCOUNTS

*Chapter 2, Public Accounts of the Province
February 2018*

hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

In addition to executing hundreds of millions in project financing over the past several years, OPG completed its first bond offering in the Canadian public market with \$500 million unsecured 10-year bonds in October 2017.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that comprises the target market for financing Ontario's Fair Hydro Plan initiative. For example, the Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors, including major investors in the Canadian power and utility bonds markets.

Ontario Power Generation has a strong track record of producing high-quality financial reports on a timely basis. In addition, OPG will report on the activities of the Fair Hydro Trust in its quarterly financial reporting. The Fair Hydro Trust will be reported as a separate segment in these public documents

In terms of administration, OPG is currently managing its own corporate public debt program, three project financing programs totaling more than \$2 billion and two commercial paper programs.

Finally, OPG's Treasury function is well positioned given its experience in developing structured financing programs and in managing multiple existing debt platforms.

The diversity of skills possessed by OPG position it to ensure an effective funding arrangement is put in place that clearly defines the electricity ratepayer as the person receiving the initial benefit of the legislation.

As OPG works through the financing program for Ontario's Fair Hydro Plan, it is focused on ensuring that financing is optimized to minimize costs to ratepayers.

In particular, attention has been given to achieving a strong credit rating for the Trust, again, with the objective of mitigating the impact to ratepayers through effective market pricing of the funds being borrowed by the Trust.

Ontario has a strong track record of producing high-quality financial reports on a timely basis. In addition, OPG will report on the activities of the Fair Hydro Trust in its quarterly financial reporting. The Fair Hydro Trust will be reported as a separate segment in these public documents

As the implementation of the financing program progresses, focus has remained on minimizing costs to ratepayers. Particular attention has been given to achieving a

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

strong credit rating for the Trust, with the objective of mitigating the impact to ratepayers through effective market pricing of the funds being borrowed by the Trust.

OFHP is delivering much-needed rate relief to electricity consumers. The policy decisions we have made in implementing GA refinancing, in consultation with third-party experts, senior officials and staff from across government, most effectively achieve the policy goals of the refinancing program and ensure that the cost of important investments in the electricity system are allocated fairly amongst electricity consumers in proportion to the benefit from received from them.

2. **To Independent Electricity System Operator (IESO), how did IESO come to the conclusion that it was acceptable to use US Generally Accepted Accounting Principles (GAAP) instead of Public Sector Accounting Standards (PSAS) for rate regulated activities?**

And, is there a clause or section of PSAS that permits the use of GAAP in a given scenario?

Response

Independent Electricity System Operator's Approach to Accounting

The Independent Electricity System Operator (IESO) follows Public Sector Accounting Standards (PSAS) for its accounting.

The PSAS neither explicitly permits, nor prohibits, the recognition, measurement, presentation or disclosure of rate-regulated activities. In absence of a clear position on an issue, standard accounting practice dictates that an entity is entitled to consult another accounting standard. If I may cite from the PSAS Handbook, Section 1150.18 and 19:

"Paragraphs PS 1150.19-.24 identify some of the other sources that a public sector reporting entity might consult to assist in selecting accounting policies and disclosures that comply with paragraph PS 1150.05. Pronouncements issued by other bodies authorized to issue accounting standards may be useful sources to consult.

For example, accounting pronouncements published with the authority of the Canadian Accounting Standards Board (AcSB), International Accounting Standards Board (IASB), US Federal Accounting Standards Advisory Board (FASAB), US Governmental Accounting Standards Board (GASB), or International Public Sector Accounting Standards Board (IPSASB) are often important sources to consult on matters not covered

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

by primary sources of GAAP or for assistance in applying a primary source of GAAP to specific circumstances."

In this case, IESO consulted US GAAP, the only accounting framework in North America that provides guidance on rate regulated operations. The IESO has since adopted aspects of the US GAAP accounting framework allowing IESO to recognize a regulatory asset.

This decision was supported by an accounting opinion from our external auditors at KPMG and aligns IESO with six of the eight other independent system operators in North America.

It's a decision IESO made after careful consideration and extensive consultation with external experts. In fact, more than one of the big-four accounting firms agree with our decision on this matter. The IESO regularly reviews its accounting policies to ensure our financial reporting best represents our operations and the substance of the accounts we oversee.

Prompted by conversation with government about Ontario's Fair Hydro Plan (OFHP) and recognizing the need to consider impacts of future government policy, IESO revisited its options for reporting market accounts and recognizing regulatory assets.

Working with its audit partner KPMG, IESO determined that there were reporting options for market accounts and regulatory assets and that a choice was required as to whether or not to report these in IESO financial statements.

By analyzing the nature of the accounts, IESO's economic relationship to them, legislative requirements and market rules it was concluded that an appropriate position for either treatment was acceptable.

Organizations in Other Jurisdictions

When we started looking into changes to our accounting policies, we wanted to look at other organizations that have similar mandates to us.

Including IESO, there are 9 independent system operators in North America; seven in the U.S. and two in Canada: The IESO and Alberta's AESO.

We had discussions with these organizations about their operations and accounting practices.

We looked at their location, the accounting framework they follow, the type of organization they are (either not-for-profit or otherwise), whether they are subject to income tax, their capital structure, how they are governed, by which body they are

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

regulated, and finally, whether they recognized balances of market participants and regulatory assets in their financial reporting.

From this research, we found that 7 of the other 8 ISOs recognize the balances of the market participants. They are:

1. **ISO New England;**
2. **NYISO**, in New York;
3. **MISO**, Midcontinent ISO which covers Midwest United States, Manitoba, and much of Arkansas, Mississippi and Louisiana;
4. **PJM**, covering the eastern U.S. states: Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia;
5. **CAISO**, in California;
6. **ERCOT**, in Texas; and
7. **Southwest Power Pool**, in central US.

When we talked to our counterparts across North America about regulatory assets, we found out that 6 of the other 8 entities recognize the economic effects of rate regulation, they are:

1. **AESO**, in Alberta;
2. ISO New England;
3. NYISO;
4. MISO;
5. PJM; and
6. ERCOT.

I should mention that the two ISOs that do not recognize the effect of rate regulation are California ISO (CAISO) and Southwest Power Pool (SPP).

When we talked to CAISO, we found out that their accounting framework actually allows for the recognition of regulatory assets and liabilities, but that it had concluded the need to recognize regulatory assets was no longer necessary.

When we talked to Southwest Power Pool, we learned that they simply do not have any variance accounts that would qualify as regulatory assets or liabilities.

So, when we looked at making the accounting change we considered that:

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

1. Including **market accounts** on our financial statements would provide increased transparency into the value of transactions that flow through Ontario's \$17 billion electricity market;
2. That **regulatory accounting** better reflected the economic substance of certain types of IESO expenses (like Smart Metering Entity expenses) which are recovered through a rate regulated by the OEB;
3. That the change would **enhance the relevance, transparency and accountability of our financial reporting**;
4. That this change would **bring IESO in line with its peers** across North America; and
5. Finally, that this accounting change would in **no way affect IESO's costs, or have any financial impact on electricity ratepayers** – all these factors confirmed our decision to make the accounting change.

Ultimately, IESO felt the public reporting of market accounts was relevant to the needs of its financial statement users and enabled greater transparency into the market transactions it oversees, which amounted to \$17 billion last year.

We also felt that recognizing regulatory assets would provide more transparency into the substance of the variance accounts we oversee.

As we just covered, this change to recognize regulated assets and market accounts brings IESO in line with accounting practices followed by other independent system operators in North America.

I should also mention, that in the past, the Ontario Power Authority, a predecessor organization of IESO, reported a subset of the market accounts on its financial statements – so this isn't new.

Role of an Independent Audit Firm

To confirm our view that the change was appropriate, IESO engaged independent audit firm KPMG for accounting research on the matter.

KPMG conducted its own research into the issue. KPMG subsequently issued a white paper on the accounting change, supporting IESO's decision to change its accounting policy. The changes were also reviewed with and supported by the Office of the Provincial Controller.

The accounting change was reviewed by IESO's Board of Directors, and approved.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

As part of our regular 2016 year-end audit, KPMG issued an accounting opinion on our financial reporting. The accounting firm issued an unqualified or “clean” accounting opinion, meaning they supported the decision.

Finally, when publishing our 2016 financial statements, in order to communicate the change of accounting policy, IESO added additional notes in its 2016 financial statements to explain the changes in the Summary of Significant Accounting Policies section of its 2016 annual report.

These changes in no way affect IESO’s costs, or have any financial impact on electricity ratepayers.

Ultimately, IESO made these changes because it will provide the users of its financial statements greater transparency into the market transactions it oversees, which amounted to \$17 billion last year, and better reflects the economic substance of IESO expenses that are recovered through rate-regulation.

It is KPMG’s responsibility to express an opinion on the financial statements based on their audit.

In our case, KPMG conducted their audit in accordance with Canadian generally accepted accounting standards.

Those accounting standards require that the auditors comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the entity’s financial statements are free from material misstatement.

Here are some of the things an audit looks into:

- o An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements.
- o The procedures selected depend on the auditor’s judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.
- o In making those risk assessments, the auditor considers internal control relevant to the entity’s preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity’s internal control.

In addition, an audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

management, as well as evaluating the overall presentation of the financial statements.

In IESO's 2016 financial statements, KPMG stated: "We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion".

This was followed by a statement of their unqualified opinion:

- o In our opinion, the financial statements present fairly, in all material respects, the financial position of IESO as at December 31, 2016, and its results of operations and the changes in its new debt and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

This is taken directly from our 2016 financial statements, which are publically available.

So the "unqualified opinion" is basically accounting-speak to say that the audit partner undertook the thorough audit process, applied the appropriate standards and believes the financial statements follow the appropriate accounting standard and fairly and accurately represent IESO's financial position at year-end.

KPMG also found that US GAAP was an appropriate accounting framework to look to for guidance on rate-regulated operations, since PSAS was silent on the issue. And that regulatory assets under ASC 980 is not an exemption from the application of US GAAP.

Finally, KPMG's research also found that the accounting change would bring IESO in line with the majority of its ISO peers across North America.

When we considered the results of our own and KPMG's research, along with the fact that the change would have no impact on IESO's costs, or have any financial impact on electricity ratepayers, we went ahead and made the accounting change.

3. To Ontario Power Generation (OPG), can you explain what sort of external expertise OPG enlisted?

And, can you explain what counsel these experts provided with respect to the structure that has been set up and the accounting that will be used?

Response

Ontario Power Generation's Qualifications

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

Let me make a few remarks about Ontario Power Generation's (OPG) qualifications as the financing manager of Ontario's Fair Hydro Plan.

OPG currently manages a \$20 billion nuclear fund and \$15 billion in pension funds and as an entity regulated by the Ontario Energy Board (OEB), OPG also has extensive experience with regulatory deferral and variance accounts.

In addition, OPG has the breadth and demonstrated track record in the financial markets including the highly successful inaugural public debt offering earlier in October, private placement of insurance linked bonds, participation in securitization programs, and the very successful project debt issuances tied to new hydroelectric developments.

These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these financing structures have resulted in international recognition.

OPG has also developed solid investor relationships and has a large investor base in the structured finance space who would be the target market for financing Ontario's Fair Hydro Plan initiative.

For example, the Lower Mattagami project financing attracted a broad investor base of about 80 institutional investors, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt and three project financing programs totaling more than \$2 billion, as well as two commercial paper programs.

Role of Ontario Power Generation as the Finance Service Manager

OPG is acting as the Finance Service Manager (FSM) as prescribed under the Ontario Fair Hydro legislation, assigned to develop the financing plans and manage the Fair Hydro Trust, which manages the debt obligations associated with Global Adjustment (GA) refinancing.

In December we set up the Fair Hydro Trust, which is ring fenced from the generation activities of OPG in an effort to reflect the unique nature of this business and not co-mingle the operational activities of the two businesses.

The financing requirements are determined by the legislation and the reduction in consumers' bills, and are funded through the Trust.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

OPG is responsible for arranging for third party debt to finance the purchase of the regulatory asset from IESO. This funding will be supplemented by both the Province and OPG.

- o The first tranche of public debt was issued in early February 2018.
- o The Trust will continue to borrow funds through the debt markets 3-4 times each year to purchase assets from Independent Electricity System Operator (IESO).

OPG is uniquely positioned to be the financing manager of Ontario's Fair Hydro Plan as we understand the supply and demand characteristics of the market. As previously mentioned, we regularly interact with the Ontario Energy Board (OEB) and the IESO, and we have experience in Treasury operations in the marketplace including relationships with credit rating agencies.

There are three specific areas that we supplemented our team with external resources.

- o First, was legal advice to ensure there is clear alignment between the legislation and the Trust and its related requirements and obligations.
- o The second was financing advice directed at the capital markets again to ensure alignment with the markets focused on achieving the most cost effective financing to ensure the rate payer impact is minimized.
- o The third was accounting advice directed at the set up and governance of the Trust and then to achieve the transparency in reporting that is critical.

Greater Transparency

As has been mentioned OPG has strong capabilities across these areas, but felt it was prudent to ensure that all steps are taken to establish the Trust and its activities in a clear and transparent manner.

The structure that has been set up in fact ensures a high level of transparency.

As these deferred amounts are funded through third party financing, the process by design in financial market space requires disclosure and oversight including credit rating agencies, the OEB, external audit of the Trust itself, additional OPG disclosure in its reports, oversight from lenders through Trust indenture documents.

Ratepayers and taxpayers will be able to clearly see the financial results of the Trust as it relates to the legislation.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

Due to OPG's ownership and control over the key activities of the OPG's Fair Hydro Trust, OPG will consolidate the financial results of the Trust in accordance with US GAAP.

OPG will report the financial results of the Trust's operations as part of its regular quarterly and annual reporting process, beginning in March 2018.

The Trust's activities will be clearly reported as a separate segment in OPG's overall results.

OPG's financial reports are audited (currently by ERNST & Young) and filed with the Ontario Securities Commission (OSC) and subject to OSC oversight and a public news release is always issued when the reports are filed.

DRAFT

Ministry of Energy – Proposed Friendly Questions:

- 1. To the Deputy Minister of Energy, why is keeping the financing costs of Ontario's Fair Hydro Plan (OFHP) on the rate-base, as opposed to the tax-base appropriate?**

And, why is Ontario Power Generation (OPG) best placed to minimize the cost of the overall program from your perspective?

Policy Objectives of Ontario's Fair Hydro Plan

Over the last decade Ontario has rebuilt our transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP has introduced new measures to lower electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

To address the impact of our electricity system investments on consumers, Ontario's Fair Hydro Plan includes:

- Refinancing the Global Adjustment (GA) over a longer term period for Regulated Price Plan (RPP) eligible consumers, including families, small businesses and farms.
- Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill. Eligible consumers will receive additional funding through assistance programs including:
 - o Establishing a new Affordability Fund which will support Ontarians who are not eligible for the [Home Assistance Program](#) and who have difficulty paying their electricity bills.

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

- o Broadening Rural or Remote Rate Protection (RRRP) to provide distribution charge relief for the customers of the local distribution companies (LDC's) with the highest distribution charges.
 - o Expanding the Ontario Electricity Support Program (OESP) to increase participation and provide further assistance to eligible participants.
 - o Establishing a new On-Reserve First Nations Delivery Rate.
- Improving sector efficiency and modernizing Ontario's electricity market, working in collaboration with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).
- Any rate increases over the next four years will be held to the rate of inflation.

Electricity rate relief programs such as the OESP and RRRP have social value and benefit vulnerable people across Ontario and so, the province has shifted these programs from being paid for through electricity bills to being paid for through government funding.

Shifting these program costs were forecast³ to cost the government up to \$2.5 billion over the first three fiscal years of OFHP. These programs, plus the 8% rebate which is also funded through the tax-base, are reducing electricity bills for provincial rate payers. In addition, the ongoing funding of these measures through the tax-base will provide ongoing benefits to rate payer into the future.

Refinancing the Global Adjustment

As well, a portion of Global Adjustment (GA) costs is being refinanced to reduce pressure on today's electricity consumers. In later years, the cost of financing will be recovered from consumers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

³ The \$2.5 billion forecast was developed in preparation for the release of Ontario's Fair Hydro Plan. Note: Some of the underlying assumptions as well as actual spending figures for the 2017-18 fiscal year would change this forecast.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Development of OFHP

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options. Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks and take necessary actions to meet the mandate.

The senior officials and staff included:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

The government also consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed. This is normal course of business governments take for complex transactions.

Role of Ontario Power Generation (OPG)

With respect to OPG, it was identified as the Financial Services Manager (FSM) responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations associated with GA refinancing. Financing requirements are determined by the legislation and will be funded through the Trust.

OPG is uniquely positioned to be the FSM, it understands the characteristics of the market, regularly interacts with the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO).

OPG has extensive experience in the Ontario energy market, capital markets, regulation and fund management and will ensure that the refinancing will be done in the most efficient and cost-effective manner.

OPG currently manages approximately \$20 billion in nuclear funds through the Decommissioning Segregated Fund and the *Used Fuel Segregated Fund* to manage nuclear liabilities, \$15 billion in pension funds and is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience in regulatory deferral and variance accounts.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

In addition to executing hundreds of millions in project financing over the past several years, OPG completed its first bond offering in the Canadian public market with \$500 million unsecured 10-year bonds in October 2017.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that comprises the target market for financing Ontario's Fair Hydro Plan initiative. For example, the Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors, including major investors in the Canadian power and utility bonds markets.

Ontario Power Generation has a strong track record of producing high-quality financial reports on a timely basis. In addition, OPG will report on the activities of the

Fair Hydro Trust in its quarterly financial reporting. The Fair Hydro Trust will be reported as a separate segment in these public documents

In terms of administration, OPG is currently managing its own corporate public debt program, three project financing programs totaling more than \$2 billion and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

As the implementation of the financing program progresses, focus has remained on minimizing costs to ratepayers. Particular attention has been given to achieving a strong credit rating for the Trust, with the objective of mitigating the impact to ratepayers through effective market pricing of the funds being borrowed by the Trust.

OFHP is delivering much-needed rate relief to electricity consumers. The policy decisions we have made in implementing GA refinancing, in consultation with third-party experts, senior officials and staff from across government, most effectively achieve the policy goals of the refinancing program and ensure that the cost of important investments in the electricity system are allocated fairly amongst electricity consumers in proportion to the benefit from received from them.

- 2. To Independent Electricity System Operator (IESO), how did IESO come to the conclusion that it was acceptable to use US Generally Accepted Accounting Principles (GAAP) instead of Public Sector Accounting Standards (PSAS) for rate regulated activities?**

And, is there a clause or section of PSAS that permits the use of GAAP in a given scenario?

Response

Independent Electricity System Operator's Approach to Accounting

The Independent Electricity System Operator (IESO) follows Public Sector Accounting Standards (PSAS) for its accounting.

The PSAS neither explicitly permits, nor prohibits, the recognition, measurement, presentation or disclosure of rate-regulated activities. In absence of a clear position on an issue, standard accounting practice dictates that an entity is entitled to consult another accounting standard. If I may cite from the PSAS Handbook, Section 1150.18 and 19:

“Paragraphs PS 1150.19-.24 identify some of the other sources that a public sector reporting entity might consult to assist in selecting accounting policies and disclosures that comply with paragraph PS 1150.05. Pronouncements issued by other bodies authorized to issue accounting standards may be useful sources to consult.

For example, accounting pronouncements published with the authority of the Canadian Accounting Standards Board (AcSB), International Accounting Standards Board (IASB), US Federal Accounting Standards Advisory Board (FASAB), US Governmental Accounting Standards Board (GASB), or International Public Sector Accounting Standards Board (IPSASB) are often important sources to consult on matters not covered by primary sources of GAAP or for assistance in applying a primary source of GAAP to specific circumstances.”

In this case, IESO consulted US GAAP, the only accounting framework in North America that provides guidance on rate regulated operations. The IESO has since adopted aspects of the US GAAP accounting framework allowing IESO to recognize a regulatory asset.

This decision was supported by an accounting opinion from our external auditors at KPMG and aligns IESO with six of the eight other independent system operators in North America.

It's a decision IESO made after careful consideration and extensive consultation with external experts. In fact, more than one of the big-four accounting firms agree with our decision on this matter. The IESO regularly reviews its accounting policies to ensure our financial reporting best represents our operations and the substance of the accounts we oversee.

Prompted by conversation with government about Ontario's Fair Hydro Plan (OFHP) and recognizing the need to consider impacts of future government policy, IESO revisited its options for reporting market accounts and recognizing regulatory assets.

Working with its audit partner KPMG, IESO determined that there were reporting options for market accounts and regulatory assets and that a choice was required as to whether or not to report these in IESO financial statements.

By analyzing the nature of the accounts, IESO's economic relationship to them, legislative requirements and market rules it was concluded that an appropriate position for either treatment was acceptable.

Organizations in Other Jurisdictions

When we started looking into changes to our accounting policies, we wanted to look at other organizations that have similar mandates to us.

Including IESO, there are 9 independent system operators in North America; seven in the U.S. and two in Canada: The IESO and Alberta's AESO.

We had discussions with these organizations about their operations and accounting practices.

We looked at their location, the accounting framework they follow, the type of organization they are (either not-for-profit or otherwise), whether they are subject to income tax, their capital structure, how they are governed, by which body they are regulated, and finally, whether they recognized balances of market participants and regulatory assets in their financial reporting.

From this research, we found that 7 of the other 8 ISOs recognize the balances of the market participants. They are:

1. **ISO New England;**
2. **NYISO**, in New York;
3. **MISO**, Midcontinent ISO which covers Midwest United States, Manitoba, and much of Arkansas, Mississippi and Louisiana;
4. **PJM**, covering the eastern U.S. states: Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia;
5. **CAISO**, in California;
6. **ERCOT**, in Texas; and
7. **Southwest Power Pool**, in central US.

When we talked to our counterparts across North America about regulatory assets, we found out that 6 of the other 8 entities recognize the economic effects of rate regulation, they are:

1. **AESO**, in Alberta;
2. ISO New England;
3. NYISO;
4. MISO;
5. PJM; and
6. ERCOT.

I should mention that the two ISOs that do not recognize the effect of rate regulation are California ISO (CAISO) and Southwest Power Pool (SPP).

When we talked to CAISO, we found out that their accounting framework actually allows for the recognition of regulatory assets and liabilities, but that it had concluded the need to recognize regulatory assets was no longer necessary.

When we talked to Southwest Power Pool, we learned that they simply do not have any variance accounts that would qualify as regulatory assets or liabilities.

So, when we looked at making the accounting change we considered that:

1. Including **market accounts** on our financial statements would provide increased transparency into the value of transactions that flow through Ontario's \$17 billion electricity market;
2. That **regulatory accounting** better reflected the economic substance of certain types of IESO expenses (like Smart Metering Entity expenses) which are recovered through a rate regulated by the OEB;
3. That the change would **enhance the relevance, transparency and accountability of our financial reporting**;
4. That this change would **bring IESO in line with its peers** across North America; and
5. Finally, that this accounting change would in **no way affect IESO's costs, or have any financial impact on electricity ratepayers** – all these factors confirmed our decision to make the accounting change.

Ultimately, IESO felt the public reporting of market accounts was relevant to the needs of its financial statement users and enabled greater transparency into the market transactions it oversees, which amounted to \$17 billion last year.

We also felt that recognizing regulatory assets would provide more transparency into the substance of the variance accounts we oversee.

As we just covered, this change to recognize regulated assets and market accounts brings IESO in line with accounting practices followed by other independent system operators in North America.

I should also mention, that in the past, the Ontario Power Authority, a predecessor organization of IESO, reported a subset of the market accounts on its financial statements – so this isn't new.

Role of an Independent Audit Firm

To confirm our view that the change was appropriate, IESO engaged independent audit firm KPMG for accounting research on the matter.

KPMG conducted its own research into the issue. KPMG subsequently issued a white paper on the accounting change, supporting IESO's decision to change its accounting policy. The changes were also reviewed with and supported by the Office of the Provincial Controller.

The accounting change was reviewed by IESO's Board of Directors, and approved.

As part of our regular 2016 year-end audit, KPMG issued an accounting opinion on our financial reporting. The accounting firm issued an unqualified or "clean" accounting opinion, meaning they supported the decision.

Finally, when publishing our 2016 financial statements, in order to communicate the change of accounting policy, IESO added additional notes in its 2016 financial statements to explain the changes in the Summary of Significant Accounting Policies section of its 2016 annual report.

These changes in no way affect IESO's costs, or have any financial impact on electricity ratepayers.

Ultimately, IESO made these changes because it will provide the users of its financial statements greater transparency into the market transactions it oversees, which amounted to \$17 billion last year, and better reflects the economic substance of IESO expenses that are recovered through rate-regulation.

It is KPMG's responsibility to express an opinion on the financial statements based on their audit.

In our case, KPMG conducted their audit in accordance with Canadian generally accepted accounting standards.

Those accounting standards require that the auditors comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the entity's financial statements are free from material misstatement.

Here are some of the things an audit looks into:

- An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements.
- The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

- In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.

In addition, an audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

In IESO's 2016 financial statements, KPMG stated: "We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion".

This was followed by a statement of their unqualified opinion:

- In our opinion, the financial statements present fairly, in all material respects, the financial position of IESO as at December 31, 2016, and its results of operations and the changes in its new debt and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

This is taken directly from our 2016 financial statements, which are publically available.

So the "unqualified opinion" is basically accounting-speak to say that the audit partner undertook the thorough audit process, applied the appropriate standards and believes the financial statements follow the appropriate accounting standard and fairly and accurately represent IESO's financial position at year-end.

KPMG also found that US GAAP was an appropriate accounting framework to look to for guidance on rate-regulated operations, since PSAS was silent on the issue. And that regulatory assets under ASC 980 is not an exemption from the application of US GAAP.

Finally, KPMG's research also found that the accounting change would bring IESO in line with the majority of its ISO peers across North America.

When we considered the results of our own and KPMG's research, along with the fact that the change would have no impact on IESO's costs, or have any financial impact on electricity ratepayers, we went ahead and made the accounting change.

3. To Ontario Power Generation (OPG), can you explain what sort of external expertise OPG enlisted?

And, can you explain what counsel these experts provided with respect to the structure that has been set up and the accounting that will be used?

Response

Ontario Power Generation's Qualifications

Let me make a few remarks about Ontario Power Generation's (OPG) qualifications as the financing manager of Ontario's Fair Hydro Plan.

OPG currently manages a \$20 billion nuclear fund and \$15 billion in pension funds and as an entity regulated by the Ontario Energy Board (OEB), OPG also has extensive experience with regulatory deferral and variance accounts.

In addition, OPG has the breadth and demonstrated track record in the financial markets including the highly successful inaugural public debt offering earlier in October, private placement of insurance linked bonds, participation in securitization programs, and the very successful project debt issuances tied to new hydroelectric developments.

These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these financing structures have resulted in international recognition.

OPG has also developed solid investor relationships and has a large investor base in the structured finance space who would be the target market for financing Ontario's Fair Hydro Plan initiative.

For example, the Lower Mattagami project financing attracted a broad investor base of about 80 institutional investors, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt and three project financing programs totaling more than \$2 billion, as well as two commercial paper programs.

Role of Ontario Power Generation as the Finance Service Manager

OPG is acting as the Finance Service Manager (FSM) as prescribed under the Ontario Fair Hydro legislation, assigned to develop the financing plans and manage the Fair Hydro Trust, which manages the debt obligations associated with Global Adjustment (GA) refinancing.

In December we set up the Fair Hydro Trust, which is ring fenced from the generation activities of OPG in an effort to reflect the unique nature of this business and not co-mingle the operational activities of the two businesses.

The financing requirements are determined by the legislation and the reduction in consumers' bills, and are funded through the Trust.

OPG is responsible for arranging for third party debt to finance the purchase of the regulatory asset from IESO. This funding will be supplemented by both the Province and OPG.

- The first tranche of public debt was issued in early February 2018.
- The Trust will continue to borrow funds through the debt markets 3-4 times each year to purchase assets from Independent Electricity System Operator (IESO).

OPG is uniquely positioned to be the financing manager of Ontario's Fair Hydro Plan as we understand the supply and demand characteristics of the market. As previously mentioned, we regularly interact with the Ontario Energy Board (OEB) and the IESO, and we have experience in Treasury operations in the marketplace including relationships with credit rating agencies.

There are three specific areas that we supplemented our team with external resources.

- First, was legal advice to ensure there is clear alignment between the legislation and the Trust and its related requirements and obligations.
- The second was financing advice directed at the capital markets again to ensure alignment with the markets focused on achieving the most cost effective financing to ensure the rate payer impact is minimized.
- The third was accounting advice directed at the set up and governance of the Trust and then to achieve the transparency in reporting that is critical.

Greater Transparency

As has been mentioned OPG has strong capabilities across these areas, but felt it was prudent to ensure that all steps are taken to establish the Trust and its activities in a clear and transparent manner.

The structure that has been set up in fact ensures a high level of transparency.

As these deferred amounts are funded through third party financing, the process by design in financial market space requires disclosure and oversight including credit rating agencies, the OEB, external audit of the Trust itself, additional OPG disclosure in its reports, oversight from lenders through Trust indenture documents.

Ratepayers and taxpayers will be able to clearly see the financial results of the Trust as it relates to the legislation.

Due to OPG's ownership and control over the key activities of the OPG's Fair Hydro Trust, OPG will consolidate the financial results of the Trust in accordance with US GAAP.

OPG will report the financial results of the Trust's operations as part of its regular quarterly and annual reporting process, beginning in March 2018.

The Trust's activities will be clearly reported as a separate segment in OPG's overall results.

OPG's financial reports are audited (currently by ERNST & Young) and filed with the Ontario Securities Commission (OSC) and subject to OSC oversight and a public news release is always issued when the reports are filed.

Ministry of Energy – Proposed Friendly Questions:

- 1. To the Deputy Minister of Energy, why is keeping the financing costs of Ontario's Fair Hydro Plan (OFHP) on the rate-base, as opposed to the tax-base appropriate?**

And, why is Ontario Power Generation (OPG) best placed to minimize the cost of the overall program from your perspective?

Policy Objectives of Ontario's Fair Hydro Plan

Over the last decade Ontario has rebuilt our transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP has introduced new measures to lower electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

To address the impact of our electricity system investments on consumers, ~~the following initiatives are being undertaken.~~ Ontario's Fair Hydro Plan includes:

- Refinancing the Global Adjustment (GA) over a longer term period for Regulated Price Plan (RPP) eligible consumers, including families, small businesses and farms.
- Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill. Eligible consumers will receive additional funding through assistance programs including:
 - o Establishing a new Affordability Fund which will support Ontarians who are not eligible for the Home Assistance Program and who have difficulty paying their electricity bills.
 - o Broadening Rural or Remote Rate Protection (RRRP) to provide distribution charge relief for the customers of the local distribution companies (LDC's) with the highest distribution charges.

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

- o Expanding the Ontario Electricity Support Program (OESP) to increase participation and provide further assistance to eligible participants.
 - o Establishing a new On-Reserve First Nations Delivery Rate.
- Improving sector efficiency and modernizing Ontario's electricity market, working in collaboration with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).
- Any rate increases over the next four years will be held to the rate of inflation.

Rate relief programs such as the OESP and RRRP have social value and benefit vulnerable people across Ontario and so, the province has shifted these programs from being paid for through electricity bills to being paid for through government funding.

This will reduce bills for everyone, and ensure these programs continue to serve those in need.

FirstAs well, a portion of Global Adjustment (GA) costs is being refinanced to reduce pressure on today's electricity consumers. In later years, the cost of financing will be recovered from consumers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of

electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Development of OFHP

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options. Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks and take necessary actions to meet the mandate.

The senior officials and staff included:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

The government also consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed. This is normal course of business governments take for complex transactions.

Role of Ontario Power Generation (OPG)

With respect to OPG, it was identified as the Financial Services Manager (FSM) responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations associated with GA refinancing. Financing requirements are determined by the legislation and will be funded through the Trust.

OPG is uniquely positioned to be the FSM, it understands the characteristics of the market, regularly interacts with the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO).

OPG has extensive experience in the Ontario energy market, capital markets, regulation and fund management and will ensure that the refinancing will be done in the most efficient and cost-effective manner.

OPG currently manages approximately \$20 billion in nuclear funds through the Decommissioning Segregated Fund and the *Used Fuel Segregated Fund* to manage nuclear liabilities, \$15 billion in pension funds and is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience in regulatory deferral and variance accounts.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

In addition to executing hundreds of millions in project financing over the past several years, OPG completed its first bond offering in the Canadian public market with \$500 million unsecured 10-year bonds in October 2017.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that comprises the target market for financing Ontario's Fair Hydro Plan initiative. For example, the Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors, including major investors in the Canadian power and utility bonds markets.

Ontario Power Generation has a strong track record of producing high-quality financial reports on a timely basis. In addition, OPG will report on the activities of the Fair Hydro Trust in its quarterly financial reporting. The Fair Hydro Trust will be reported as a separate segment in these public documents

In terms of administration, OPG is currently managing its own corporate public debt program, three project financing programs totaling more than \$2 billion and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

As the implementation of the financing program progresses, focus has remained on minimizing costs to ratepayers. Particular attention has been given to achieving a

strong credit rating for the Trust, with the objective of mitigating the impact to ratepayers through effective market pricing of the funds being borrowed by the Trust.

OFHP is delivering much-needed rate relief to electricity consumers. The policy decisions we have made in implementing GA refinancing, in consultation with third-party experts, senior officials and staff from across government, most effectively achieve the policy goals of the refinancing program and ensure that the cost of important investments in the electricity system are allocated fairly amongst electricity consumers in proportion to the benefit from received from them.

- 2. To Independent Electricity System Operator (IESO), how did IESO come to the conclusion that it was acceptable to use US Generally Accepted Accounting Principles (GAAP) instead of Public Sector Accounting Standards (PSAS) for rate regulated activities?**

And, is there a clause or section of PSAS that permits the use of GAAP in a given scenario?

Response

Independent Electricity System Operator's Approach to Accounting

The Independent Electricity System Operator (IESO) follows Public Sector Accounting Standards (PSAS) for its accounting.

The PSAS neither explicitly permits, nor prohibits, the recognition, measurement, presentation or disclosure of rate-regulated activities. In absence of a clear position on an issue, standard accounting practice dictates that an entity is entitled to consult another accounting standard. If I may cite from the PSAS Handbook, Section 1150.18 and 19:

"Paragraphs PS 1150.19-.24 identify some of the other sources that a public sector reporting entity might consult to assist in selecting accounting policies and disclosures that comply with paragraph PS 1150.05. Pronouncements issued by other bodies authorized to issue accounting standards may be useful sources to consult.

For example, accounting pronouncements published with the authority of the Canadian Accounting Standards Board (AcSB), International Accounting Standards Board (IASB), US Federal Accounting Standards Advisory Board (FASAB), US Governmental Accounting Standards Board (GASB), or International Public Sector Accounting Standards Board (IPSASB) are often important sources to consult on matters not covered

by primary sources of GAAP or for assistance in applying a primary source of GAAP to specific circumstances.”

In this case, IESO consulted US GAAP, the only accounting framework in North America that provides guidance on rate regulated operations. The IESO has since adopted aspects of the US GAAP accounting framework allowing IESO to recognize a regulatory asset.

This decision was supported by an accounting opinion from our external auditors at KPMG and aligns IESO with six of the eight other independent system operators in North America.

It's a decision IESO made after careful consideration and extensive consultation with external experts. In fact, more than one of the big-four accounting firms agree with our decision on this matter. The IESO regularly reviews its accounting policies to ensure our financial reporting best represents our operations and the substance of the accounts we oversee.

Prompted by conversation with government about Ontario's Fair Hydro Plan (OFHP) and recognizing the need to consider impacts of future government policy, IESO revisited its options for reporting market accounts and recognizing regulatory assets.

Working with its audit partner KPMG, IESO determined that there were reporting options for market accounts and regulatory assets and that a choice was required as to whether or not to report these in IESO financial statements.

By analyzing the nature of the accounts, IESO's economic relationship to them, legislative requirements and market rules it was concluded that an appropriate position for either treatment was acceptable.

Organizations in Other Jurisdictions

When we started looking into changes to our accounting policies, we wanted to look at other organizations that have similar mandates to us.

Including IESO, there are 9 independent system operators in North America; seven in the U.S. and two in Canada: The IESO and Alberta's AESO.

We had discussions with these organizations about their operations and accounting practices.

We looked at their location, the accounting framework they follow, the type of organization they are (either not-for-profit or otherwise), whether they are subject to income tax, their capital structure, how they are governed, by which body they are

regulated, and finally, whether they recognized balances of market participants and regulatory assets in their financial reporting.

From this research, we found that 7 of the other 8 ISOs recognize the balances of the market participants. They are:

1. **ISO New England;**
2. **NYISO**, in New York;
3. **MISO**, Midcontinent ISO which covers Midwest United States, Manitoba, and much of Arkansas, Mississippi and Louisiana;
4. **PJM**, covering the eastern U.S. states: Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia;
5. **CAISO**, in California;
6. **ERCOT**, in Texas; and
7. **Southwest Power Pool**, in central US.

When we talked to our counterparts across North America about regulatory assets, we found out that 6 of the other 8 entities recognize the economic effects of rate regulation, they are:

1. **AESO**, in Alberta;
2. ISO New England;
3. NYISO;
4. MISO;
5. PJM; and
6. ERCOT.

I should mention that the two ISOs that do not recognize the effect of rate regulation are California ISO (CAISO) and Southwest Power Pool (SPP).

When we talked to CAISO, we found out that their accounting framework actually allows for the recognition of regulatory assets and liabilities, but that it had concluded the need to recognize regulatory assets was no longer necessary.

When we talked to Southwest Power Pool, we learned that they simply do not have any variance accounts that would qualify as regulatory assets or liabilities.

So, when we looked at making the accounting change we considered that:

1. Including **market accounts** on our financial statements would provide increased transparency into the value of transactions that flow through Ontario's \$17 billion electricity market;
2. That **regulatory accounting** better reflected the economic substance of certain types of IESO expenses (like Smart Metering Entity expenses) which are recovered through a rate regulated by the OEB;
3. That the change would **enhance the relevance, transparency and accountability of our financial reporting**;
4. That this change would **bring IESO in line with its peers** across North America; and
5. Finally, that this accounting change would in **no way affect IESO's costs, or have any financial impact on electricity ratepayers** – all these factors confirmed our decision to make the accounting change.

Ultimately, IESO felt the public reporting of market accounts was relevant to the needs of its financial statement users and enabled greater transparency into the market transactions it oversees, which amounted to \$17 billion last year.

We also felt that recognizing regulatory assets would provide more transparency into the substance of the variance accounts we oversee.

As we just covered, this change to recognize regulated assets and market accounts brings IESO in line with accounting practices followed by other independent system operators in North America.

I should also mention, that in the past, the Ontario Power Authority, a predecessor organization of IESO, reported a subset of the market accounts on its financial statements – so this isn't new.

Role of an Independent Audit Firm

To confirm our view that the change was appropriate, IESO engaged independent audit firm KPMG for accounting research on the matter.

KPMG conducted its own research into the issue. KPMG subsequently issued a white paper on the accounting change, supporting IESO's decision to change its accounting policy. The changes were also reviewed with and supported by the Office of the Provincial Controller.

The accounting change was reviewed by IESO's Board of Directors, and approved.

As part of our regular 2016 year-end audit, KPMG issued an accounting opinion on our financial reporting. The accounting firm issued an unqualified or “clean” accounting opinion, meaning they supported the decision.

Finally, when publishing our 2016 financial statements, in order to communicate the change of accounting policy, IESO added additional notes in its 2016 financial statements to explain the changes in the Summary of Significant Accounting Policies section of its 2016 annual report.

These changes in no way affect IESO’s costs, or have any financial impact on electricity ratepayers.

Ultimately, IESO made these changes because it will provide the users of its financial statements greater transparency into the market transactions it oversees, which amounted to \$17 billion last year, and better reflects the economic substance of IESO expenses that are recovered through rate-regulation.

It is KPMG’s responsibility to express an opinion on the financial statements based on their audit.

In our case, KPMG conducted their audit in accordance with Canadian generally accepted accounting standards.

Those accounting standards require that the auditors comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the entity’s financial statements are free from material misstatement.

Here are some of the things an audit looks into:

- An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements.
- The procedures selected depend on the auditor’s judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.
- In making those risk assessments, the auditor considers internal control relevant to the entity’s preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity’s internal control.

In addition, an audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by

management, as well as evaluating the overall presentation of the financial statements.

In IESO's 2016 financial statements, KPMG stated: "We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion".

This was followed by a statement of their unqualified opinion:

- In our opinion, the financial statements present fairly, in all material respects, the financial position of IESO as at December 31, 2016, and its results of operations and the changes in its new debt and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

This is taken directly from our 2016 financial statements, which are publically available.

So the "unqualified opinion" is basically accounting-speak to say that the audit partner undertook the thorough audit process, applied the appropriate standards and believes the financial statements follow the appropriate accounting standard and fairly and accurately represent IESO's financial position at year-end.

KPMG also found that US GAAP was an appropriate accounting framework to look to for guidance on rate-regulated operations, since PSAS was silent on the issue. And that regulatory assets under ASC 980 is not an exemption from the application of US GAAP.

Finally, KPMG's research also found that the accounting change would bring IESO in line with the majority of its ISO peers across North America.

When we considered the results of our own and KPMG's research, along with the fact that the change would have no impact on IESO's costs, or have any financial impact on electricity ratepayers, we went ahead and made the accounting change.

3. To Ontario Power Generation (OPG), can you explain what sort of external expertise OPG enlisted?

And, can you explain what counsel these experts provided with respect to the structure that has been set up and the accounting that will be used?

Response

Ontario Power Generation's Qualifications

Let me make a few remarks about Ontario Power Generation's (OPG) qualifications as the financing manager of Ontario's Fair Hydro Plan.

OPG currently manages a \$20 billion nuclear fund and \$15 billion in pension funds and as an entity regulated by the Ontario Energy Board (OEB), OPG also has extensive experience with regulatory deferral and variance accounts.

In addition, OPG has the breadth and demonstrated track record in the financial markets including the highly successful inaugural public debt offering earlier in October, private placement of insurance linked bonds, participation in securitization programs, and the very successful project debt issuances tied to new hydroelectric developments.

These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these financing structures have resulted in international recognition.

OPG has also developed solid investor relationships and has a large investor base in the structured finance space who would be the target market for financing Ontario's Fair Hydro Plan initiative.

For example, the Lower Mattagami project financing attracted a broad investor base of about 80 institutional investors, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt and three project financing programs totaling more than \$2 billion, as well as two commercial paper programs.

Role of Ontario Power Generation as the Finance Service Manager

OPG is acting as the Finance Service Manager (FSM) as prescribed under the Ontario Fair Hydro legislation, assigned to develop the financing plans and manage the Fair Hydro Trust, which manages the debt obligations associated with Global Adjustment (GA) refinancing.

In December we set up the Fair Hydro Trust, which is ring fenced from the generation activities of OPG in an effort to reflect the unique nature of this business and not co-mingle the operational activities of the two businesses.

The financing requirements are determined by the legislation and the reduction in consumers' bills, and are funded through the Trust.

OPG is responsible for arranging for third party debt to finance the purchase of the regulatory asset from IESO. This funding will be supplemented by both the Province and OPG.

- The first tranche of public debt was issued in early February 2018.
- The Trust will continue to borrow funds through the debt markets 3-4 times each year to purchase assets from Independent Electricity System Operator (IESO).

OPG is uniquely positioned to be the financing manager of Ontario's Fair Hydro Plan as we understand the supply and demand characteristics of the market. As previously mentioned, we regularly interact with the Ontario Energy Board (OEB) and the IESO, and we have experience in Treasury operations in the marketplace including relationships with credit rating agencies.

There are three specific areas that we supplemented our team with external resources.

- First, was legal advice to ensure there is clear alignment between the legislation and the Trust and its related requirements and obligations.
- The second was financing advice directed at the capital markets again to ensure alignment with the markets focused on achieving the most cost effective financing to ensure the rate payer impact is minimized.
- The third was accounting advice directed at the set up and governance of the Trust and then to achieve the transparency in reporting that is critical.

Greater Transparency

As has been mentioned OPG has strong capabilities across these areas, but felt it was prudent to ensure that all steps are taken to establish the Trust and its activities in a clear and transparent manner.

The structure that has been set up in fact ensures a high level of transparency.

As these deferred amounts are funded through third party financing, the process by design in financial market space requires disclosure and oversight including credit rating agencies, the OEB, external audit of the Trust itself, additional OPG disclosure in its reports, oversight from lenders through Trust indenture documents.

Ratepayers and taxpayers will be able to clearly see the financial results of the Trust as it relates to the legislation.

Due to OPG's ownership and control over the key activities of the OPG's Fair Hydro Trust, OPG will consolidate the financial results of the Trust in accordance with US GAAP.

OPG will report the financial results of the Trust's operations as part of its regular quarterly and annual reporting process, beginning in March 2018.

The Trust's activities will be clearly reported as a separate segment in OPG's overall results.

OPG's financial reports are audited (currently by ERNST & Young) and filed with the Ontario Securities Commission (OSC) and subject to OSC oversight and a public news release is always issued when the reports are filed.

DRAFT

Ministry of Energy – Proposed Friendly Questions:

1. To the Deputy Minister of Energy, why is keeping the financing costs of Ontario's Fair Hydro Plan (OFHP) on the rate-base, as opposed to the tax-base appropriate?

And, why is Ontario Power Generation (OPG) best placed to minimize the cost of the overall program from your perspective?

Policy Objectives of Ontario's Fair Hydro Plan

Over the last decade Ontario has rebuilt the provincial transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher electricity bills.

Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history.

Ontario's Fair Hydro Plan (OFHP) has introduced new measures to lower electricity bills by 25% on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

In the development of Ontario Fair Hydro Plan (OFHP), the government made the decision to provide rate relief to specific residential consumers thought the introduction of new and enhanced electricity social programs, such as Ontario Electricity Support Program (OESP) and Rural or Remote Rate Protection (RRRP).

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

At the same time, the government also made a policy decision that these new measures would be more appropriately funded from the tax-base, not the rate-base. In addition, a policy decision was made to refinance the Global Adjustment (GA) over a longer amortization period that better reflected the life of the assets.

To better understand of Ontario's Fair Hydro Plan (OFHP), it is important to unpack the key components of the plan in more detail. The three key components that are included in Ontario's Fair Hydro Plan (OFHP) are:

1. The Ontario Rebate for Electricity Consumers (OREC) program. The (OREC) program, which commenced on January 1, 2017, provides financial assistance to eligible consumers in respect of electricity costs. The rebate is equal to eight per cent (8%) of the base invoice amount.
2. Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill from the rate-base to the tax-base.
3. Refinancing the Global Adjustment (GA) over a longer term period for Regulated Price Plan (RPP) eligible electricity consumers, including families, small businesses and farms.

Ontario Rebate for Electricity Consumers

On January 1, 2017, the government introduced the Ontario Rebate for Electricity Consumers (OREC) program which provides financial assistance to eligible consumers in respect of electricity costs.

The rebate is equal to eight per cent (8%) of the base invoice amount which is the provincial portion of the Harmonized Sales Tax (HST) on the bills of residential, farm, small business and other eligible customers.

- Results in an average savings of approximately \$130 annually or \$11 each month.

This is part of Ontario's plan to help people with the costs of everyday living by reducing electricity costs. The rebate is available to all consumers eligible for the Regulated Price Plan (RPP) – this includes about five million residential consumers, small businesses and farms.

- The OREC has an approved 2017-18 expenditure of \$939 million.

Electricity consumers eligible for the 8% rebate are also eligible for Global Adjustment refinancing, including residential consumers, farms, most small businesses, long-term care homes and condominiums. Eligible consumers who have signed contracts with electricity retailers are also eligible.

Enhancing Social Programs

Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill. Eligible consumers will receive additional funding through assistance programs including:

- Establishing a new Affordability Fund which will support Ontarians who are not eligible for the Home Assistance Program and who have difficulty paying their electricity bills.
- Broadening Rural or Remote Rate Protection (RRRP) mitigates some of the high costs of electricity distribution in rural or remote areas of the province. It is a legacy program of the old Ontario Hydro and has existed in its current form since 2001.
 - About 800,000 customers now benefit from the enhanced rate protection.
 - Residential customers from the following LDCs benefit from the broadened rate protection: Hydro One low density (R2) and medium density (R1) customers,, Northern Ontario Wires, Lakeland Power (Parry Sound),, Chapleau Public Utilities Corporation, Sioux Lookout Hydro, InnPower, Atikokan Hydro and Algoma Power.

- Expanding the Ontario Electricity Support Program (OESP) to increase participation and provide further assistance to eligible participants.
 - These changes came into effect on May 1, 2017 and included increasing on-bill credits by 50% and expanding eligibility so more Ontarians are eligible.
 - This program is available to households that receive electricity bills and meet the household size and income eligibility criteria. Monthly, on-bill credits of \$35-75 are available to eligible applicants, and for those with additional energy needs, the credit ranges from \$52-113.
 - In January of this year, over 220,000 OESP credits were issued to households across the province.
- Establishing a new On-Reserve First Nations Delivery Credit.
 - Since July 1, 2017, the First Nations Delivery Credit has provided on-reserve First Nations households who are customers of licensed electricity utilities a credit equal to 100% of the electricity delivery charge on their electricity bills.
 - The First Nations Delivery Credit helps address some of the unique challenges that on-reserve First Nations customers face and recognizes First Nations' contribution to the provincial electricity system.
 - Data reported by the Independent Electricity System Operator (IESO) indicates that over 20,000 customers are receiving the credit, which was the target pre-launch and reflects a successful rollout.

Refinancing the Global Adjustment

To reduce pressure on today's electricity consumers, a portion of Global Adjustment (GA) costs is being refinanced. In later years, the cost of financing will be recovered from consumers.

Refinancing the Global Adjustment (GA) is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.

The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of Ontario Fair Hydro Plan (OFHP) is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

[We also believe it is appropriate for the tax-base to fund rate relief to specific residential consumers through new and enhanced electricity social programs, such as Ontario Electricity Support Program (OESP) and Rural or Remote Rate Protection (RRRP).]

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

Ontario's Fair Hydro Plan (OFHP) operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Now, I would like to go into a bit more detail on the development of Ontario's Fair Hydro Plan (OFHP) and the role of Ontario Power Generation (OPG).

Development of Ontario's Fair Hydro Plan (OFHP)

In developing Ontario's Fair Hydro Plan (OFHP) and the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options, including the appropriate life of the assets and amortization period.

In addition, senior officials and staff from several departments and agencies, led by the Ministry of Energy, met regularly in the development of the policy and structure of Ontario's Fair Hydro Plan (OFHP).

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO);
- Ontario Power Generation Inc. (OPG); and
- Ontario Energy Board (OEB).

The government also consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed. This is a normal course of business that governments take for complex transactions.

Role of Ontario Power Generation (OPG)

Ontario Power Generation (OPG), who has been identified as the Financial Services Manager (FSM) responsible for the financing plans and the Fair Hydro Trust (i.e., the entity that will manage the debt obligations), has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

Ontario Power Generation (OPG) is uniquely positioned to be the Financial Service Manager (FSM), it understands the characteristics of the market, and regularly interacts with the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO).

Ontario Power Generation (OPG) has extensive experience in the Ontario energy market, capital markets, regulation and fund management and will ensure that the refinancing will be done in the most efficient and cost-effective manner.

Ontario Power Generation (OPG) currently manages approximately \$20 billion in nuclear funds through the Decommissioning Segregated Fund and the *Used Fuel Segregated Fund* to manage nuclear liabilities, \$15 billion in pension funds and is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience in regulatory deferral and variance accounts.

Ontario Power Generation (OPG) has a demonstrated track record in the financial markets with respect to its:

- Corporate Debt platform;
- Private placement of insurance linked bonds;
- Participation in securitization programs; and

- Highly successful project debt issuances tied to new hydroelectric developments.

These financing initiatives have been well received by investors at a reasonable cost to Ontario Power Generation (OPG). The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

In addition to executing hundreds of millions in project financing over the past several years, Ontario Power Generation (OPG) completed its first bond offering in the Canadian public market with \$500 million unsecured 10-year bonds in October 2017.

[I would point out OPG staff are with us today should you have additional questions with respect to OPG's first issuance, announced on February 6, 2017.]

Ontario Power Generation (OPG) has developed solid investor relationships and has a large investor base in the structured finance space that comprises the target market for financing Ontario's Fair Hydro Plan (OFHP) initiative. For example, the Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors, including major investors in the Canadian power and utility bonds markets.

Ontario Power Generation (OPG) has a strong track record of producing high-quality financial reports on a timely basis. In addition, Ontario Power Generation (OPG) will report on the activities of the Fair Hydro Trust in its quarterly financial reporting. The Fair Hydro Trust will be reported as a separate segment in these public documents

In terms of administration, Ontario Power Generation (OPG) is currently managing its own corporate public debt program, three project financing programs totaling more than \$2 billion and two commercial paper programs.

Finally, Ontario Power Generation's (OPG) Treasury functions are well positioned given their management of existing multiple debt programs.

As the implementation of the financing program progresses, focus has remained on minimizing costs to ratepayers. Particular attention has been given to achieving a strong credit rating for the Trust, with the objective of mitigating the impact to ratepayers through effective market pricing of the funds being borrowed by the Trust.

Conclusion

Ontario's Fair Hydro Plan (OFHP) is delivering much-needed rate relief to electricity consumers.

The policy decisions that have been made in implementing Global Adjustment (GA) refinancing, in consultation with third-party experts, senior officials and staff from across government, most effectively achieve the policy goals of the refinancing program and ensure that the cost of important investments in the electricity system are allocated fairly amongst electricity consumers in proportion to the benefit received from them.

Over the last decade Ontario has rebuilt the transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. These actions have led to a cleaner and more reliable electricity system.

2. To Independent Electricity System Operator (IESO), how did IESO come to the conclusion that it was acceptable to use US Generally Accepted Accounting Principles (GAAP) instead of Public Sector Accounting Standards (PSAS) for rate regulated activities?

And, is there a clause or section of PSAS that permits the use of GAAP in a given scenario?

Response

Independent Electricity System Operator's Approach to Accounting

The Independent Electricity System Operator (IESO) follows Public Sector Accounting Standards (PSAS) for its accounting.

The PSAS neither explicitly permits, nor prohibits, the recognition, measurement, presentation or disclosure of rate-regulated activities. In absence of a clear position on an issue, standard accounting practice dictates that an entity is entitled to consult another accounting standard. If I may cite from the PSAS Handbook, Section 1150.18 and 19:

"Paragraphs PS 1150.19-.24 identify some of the other sources that a public sector reporting entity might consult to assist in selecting accounting policies and disclosures that comply with paragraph PS 1150.05. Pronouncements issued by other bodies authorized to issue accounting standards may be useful sources to consult.

For example, accounting pronouncements published with the authority of the Canadian Accounting Standards Board (AcSB), International Accounting Standards Board (IASB), US Federal Accounting Standards Advisory Board (FASAB), US Governmental Accounting Standards Board (GASB), or International Public Sector Accounting Standards Board (IPSASB) are often important sources to consult on matters not covered by primary sources of GAAP or for assistance in applying a primary source of GAAP to specific circumstances."

In this case, IESO consulted US GAAP, the only accounting framework in North America that provides guidance on rate regulated operations. The IESO has since adopted aspects of the US GAAP accounting framework allowing IESO to recognize a regulatory asset.

This decision was supported by an accounting opinion from our external auditors at KPMG and aligns IESO with six of the eight other independent system operators in North America.

It's a decision IESO made after careful consideration and extensive consultation with external experts. In fact, more than one of the big-four accounting firms agree with our decision on this matter. The IESO regularly reviews its accounting policies to ensure our financial reporting best represents our operations and the substance of the accounts we oversee.

Prompted by conversation with government about Ontario's Fair Hydro Plan (OFHP) and recognizing the need to consider impacts of future government policy, IESO revisited its options for reporting market accounts and recognizing regulatory assets.

Working with its audit partner KPMG, IESO determined that there were reporting options for market accounts and regulatory assets and that a choice was required as to whether or not to report these in IESO financial statements.

By analyzing the nature of the accounts, IESO's economic relationship to them, legislative requirements and market rules it was concluded that an appropriate position for either treatment was acceptable.

Organizations in Other Jurisdictions

When we started looking into changes to our accounting policies, we wanted to look at other organizations that have similar mandates to us.

Including IESO, there are 9 independent system operators in North America; seven in the U.S. and two in Canada: The IESO and Alberta's AESO.

We had discussions with these organizations about their operations and accounting practices.

We looked at their location, the accounting framework they follow, the type of organization they are (either not-for-profit or otherwise), whether they are subject to income tax, their capital structure, how they are governed, by which body they are regulated, and finally, whether they recognized balances of market participants and regulatory assets in their financial reporting.

From this research, we found that 7 of the other 8 ISOs recognize the balances of the market participants. They are:

1. **ISO New England;**
2. **NYISO**, in New York;
3. **MISO**, Midcontinent ISO which covers Midwest United States, Manitoba, and much of Arkansas, Mississippi and Louisiana;
4. **PJM**, covering the eastern U.S. states: Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio,

Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia;

5. **CAISO**, in California;
6. **ERCOT**, in Texas; and
7. **Southwest Power Pool**, in central US.

When we talked to our counterparts across North America about regulatory assets, we found out that 6 of the other 8 entities recognize the economic effects of rate regulation, they are:

1. **AESO**, in Alberta;
2. ISO New England;
3. NYISO;
4. MISO;
5. PJM; and
6. ERCOT.

I should mention that the two ISOs that do not recognize the effect of rate regulation are California ISO (CAISO) and Southwest Power Pool (SPP).

When we talked to CAISO, we found out that their accounting framework actually allows for the recognition of regulatory assets and liabilities, but that it had concluded the need to recognize regulatory assets was no longer necessary.

When we talked to Southwest Power Pool, we learned that they simply do not have any variance accounts that would qualify as regulatory assets or liabilities.

So, when we looked at making the accounting change we considered that:

1. Including **market accounts** on our financial statements would provide increased transparency into the value of transactions that flow through Ontario's \$17 billion electricity market;
2. That **regulatory accounting** better reflected the economic substance of certain types of IESO expenses (like Smart Metering Entity expenses) which are recovered through a rate regulated by the OEB;
3. That the change would **enhance the relevance, transparency and accountability of our financial reporting**;
4. That this change would **bring IESO in line with its peers** across North America; and

5. Finally, that this accounting change would in **no way affect IESO's costs, or have any financial impact on electricity ratepayers** – all these factors confirmed our decision to make the accounting change.

Ultimately, IESO felt the public reporting of market accounts was relevant to the needs of its financial statement users and enabled greater transparency into the market transactions it oversees, which amounted to \$17 billion last year.

We also felt that recognizing regulatory assets would provide more transparency into the substance of the variance accounts we oversee.

As we just covered, this change to recognize regulated assets and market accounts brings IESO in line with accounting practices followed by other independent system operators in North America.

I should also mention, that in the past, the Ontario Power Authority, a predecessor organization of IESO, reported a subset of the market accounts on its financial statements – so this isn't new.

Role of an Independent Audit Firm

To confirm our view that the change was appropriate, IESO engaged independent audit firm KPMG for accounting research on the matter.

KPMG conducted its own research into the issue. KPMG subsequently issued a white paper on the accounting change, supporting IESO's decision to change its accounting policy. The changes were also reviewed with and supported by the Office of the Provincial Controller.

The accounting change was reviewed by IESO's Board of Directors, and approved.

As part of our regular 2016 year-end audit, KPMG issued an accounting opinion on our financial reporting. The accounting firm issued an unqualified or "clean" accounting opinion, meaning they supported the decision.

Finally, when publishing our 2016 financial statements, in order to communicate the change of accounting policy, IESO added additional notes in its 2016 financial statements to explain the changes in the Summary of Significant Accounting Policies section of its 2016 annual report.

These changes in no way affect IESO's costs, or have any financial impact on electricity ratepayers.

Ultimately, IESO made these changes because it will provide the users of its financial statements greater transparency into the market transactions it oversees,

which amounted to \$17 billion last year, and better reflects the economic substance of IESO expenses that are recovered through rate-regulation.

It is KPMG's responsibility to express an opinion on the financial statements based on their audit.

In our case, KPMG conducted their audit in accordance with Canadian generally accepted accounting standards.

Those accounting standards require that the auditors comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the entity's financial statements are free from material misstatement.

Here are some of the things an audit looks into:

- An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements.
- The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.
- In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.

In addition, an audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

In IESO's 2016 financial statements, KPMG stated: "We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion".

This was followed by a statement of their unqualified opinion:

- In our opinion, the financial statements present fairly, in all material respects, the financial position of IESO as at December 31, 2016, and its results of operations and the changes in its new debt and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

This is taken directly from our 2016 financial statements, which are publically available.

So the “unqualified opinion” is basically accounting-speak to say that the audit partner undertook the thorough audit process, applied the appropriate standards and believes the financial statements follow the appropriate accounting standard and fairly and accurately represent IESO’s financial position at year-end.

KPMG also found that US GAAP was an appropriate accounting framework to look to for guidance on rate-regulated operations, since PSAS was silent on the issue. And that regulatory assets under ASC 980 is not an exemption from the application of US GAAP.

Finally, KPMG’s research also found that the accounting change would bring IESO in line with the majority of its ISO peers across North America.

When we considered the results of our own and KPMG’s research, along with the fact that the change would have no impact on IESO’s costs, or have any financial impact on electricity ratepayers, we went ahead and made the accounting change.

3. To Ontario Power Generation (OPG), can you explain what sort of external expertise OPG enlisted?

And, can you explain what counsel these experts provided with respect to the structure that has been set up and the accounting that will be used?

Response

Ontario Power Generation’s Qualifications

Let me make a few remarks about Ontario Power Generation’s (OPG) qualifications as the financing manager of Ontario’s Fair Hydro Plan.

OPG currently manages a \$20 billion nuclear fund and \$15 billion in pension funds and as an entity regulated by the Ontario Energy Board (OEB), OPG also has extensive experience with regulatory deferral and variance accounts.

In addition, OPG has the breadth and demonstrated track record in the financial markets including the highly successful inaugural public debt offering earlier in October, private placement of insurance linked bonds, participation in securitization programs, and the very successful project debt issuances tied to new hydroelectric developments.

These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these financing structures have resulted in international recognition.

OPG has also developed solid investor relationships and has a large investor base in the structured finance space who would be the target market for financing Ontario's Fair Hydro Plan initiative.

For example, the Lower Mattagami project financing attracted a broad investor base of about 80 institutional investors, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt and three project financing programs totaling more than \$2 billion, as well as two commercial paper programs.

Role of Ontario Power Generation as the Finance Service Manager

OPG is acting as the Finance Service Manager (FSM) as prescribed under the Ontario Fair Hydro legislation, assigned to develop the financing plans and manage the Fair Hydro Trust, which manages the debt obligations associated with Global Adjustment (GA) refinancing.

In December we set up the Fair Hydro Trust, which is ring fenced from the generation activities of OPG in an effort to reflect the unique nature of this business and not co-mingle the operational activities of the two businesses.

The financing requirements are determined by the legislation and the reduction in consumers' bills, and are funded through the Trust.

OPG is responsible for arranging for third party debt to finance the purchase of the regulatory asset from IESO. This funding will be supplemented by both the Province and OPG.

- The first tranche of public debt was issued in early February 2018.
- The Trust will continue to borrow funds through the debt markets 3-4 times each year to purchase assets from Independent Electricity System Operator (IESO).

OPG is uniquely positioned to be the financing manager of Ontario's Fair Hydro Plan as we understand the supply and demand characteristics of the market. As previously mentioned, we regularly interact with the Ontario Energy Board (OEB) and the IESO, and we have experience in Treasury operations in the marketplace including relationships with credit rating agencies.

There are three specific areas that we supplemented our team with external resources.

- First, was legal advice to ensure there is clear alignment between the legislation and the Trust and its related requirements and obligations.
- The second was financing advice directed at the capital markets again to ensure alignment with the markets focused on achieving the most cost effective financing to ensure the rate payer impact is minimized.
- The third was accounting advice directed at the set up and governance of the Trust and then to achieve the transparency in reporting that is critical.

Greater Transparency

As has been mentioned OPG has strong capabilities across these areas, but felt it was prudent to ensure that all steps are taken to establish the Trust and its activities in a clear and transparent manner.

The structure that has been set up in fact ensures a high level of transparency.

As these deferred amounts are funded through third party financing, the process by design in financial market space requires disclosure and oversight including credit rating agencies, the OEB, external audit of the Trust itself, additional OPG disclosure in its reports, oversight from lenders through Trust indenture documents.

Ratepayers and taxpayers will be able to clearly see the financial results of the Trust as it relates to the legislation.

Due to OPG's ownership and control over the key activities of the OPG's Fair Hydro Trust, OPG will consolidate the financial results of the Trust in accordance with US GAAP.

OPG will report the financial results of the Trust's operations as part of its regular quarterly and annual reporting process, beginning in March 2018.

The Trust's activities will be clearly reported as a separate segment in OPG's overall results.

OPG's financial reports are audited (currently by ERNST & Young) and filed with the Ontario Securities Commission (OSC) and subject to OSC oversight and a public news release is always issued when the reports are filed.

Ministry of Energy – Proposed Friendly Questions:

- 1. To the Deputy Minister of Energy, why is keeping the financing costs of Ontario's Fair Hydro Plan (OFHP) on the rate-base, as opposed to the tax-base appropriate?**

And, why is Ontario Power Generation (OPG) best placed to minimize the cost of the overall program from your perspective?

Policy Objectives of Ontario's Fair Hydro Plan

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP has introduced new measures to lower electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

Refinancing the Global Adjustment (GA) is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Development of OFHP

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options. Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks and take necessary actions to meet the mandate.

The senior officials and staff included:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

The government also consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed. This is normal course of business governments take for complex transactions.

Role of Ontario Power Generation (OPG)

With respect to OPG, it was identified as the Financial Services Manager (FSM) responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations associated with GA refinancing. Financing requirements are determined by the legislation and will be funded through the Trust.

OPG is uniquely positioned to be the FSM, it understands the characteristics of the market, regularly interacts with the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO).

OPG has extensive experience in the Ontario energy market, capital markets, regulation and fund management and will ensure that the refinancing will be done in the most efficient and cost-effective manner.

OPG currently manages approximately \$20 billion in nuclear funds through the Decommissioning Segregated Fund and the *Used Fuel Segregated Fund* to manage nuclear liabilities, \$15 billion in pension funds and is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience in regulatory deferral and variance accounts.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

In addition to executing hundreds of millions in project financing over the past several years, OPG completed its first bond offering in the Canadian public market with \$500 million unsecured 10-year bonds in October 2017.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that comprises the target market for financing Ontario's Fair Hydro Plan initiative. For example, the Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors, including major investors in the Canadian power and utility bonds markets.

Ontario Power Generation has a strong track record of producing high-quality financial reports on a timely basis. In addition, OPG will report on the activities of the Fair Hydro Trust in its quarterly financial reporting. The Fair Hydro Trust will be reported as a separate segment in these public documents

In terms of administration, OPG is currently managing its own corporate public debt program, three project financing programs totaling more than \$2 billion and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

As the implementation of the financing program progresses, focus has remained on minimizing costs to ratepayers. Particular attention has been given to achieving a strong credit rating for the Trust, with the objective of mitigating the impact to ratepayers through effective market pricing of the funds being borrowed by the Trust.

OFHP is delivering much-needed rate relief to electricity consumers. The policy decisions we have made in implementing GA refinancing, in consultation with third-party experts, senior officials and staff from across government, most effectively achieve the policy goals of the refinancing program and ensure that the cost of important investments in the electricity system are allocated fairly amongst electricity consumers in proportion to the benefit from received from them.

- 2. To Independent Electricity System Operator (IESO), how did IESO come to the conclusion that it was acceptable to use US Generally Accepted Accounting Principles (GAAP) instead of Public Sector Accounting Standards (PSAS) for rate regulated activities?**

And, is there a clause or section of PSAS that permits the use of GAAP in a given scenario?

Response

Independent Electricity System Operator's Approach to Accounting

The Independent Electricity System Operator (IESO) follows Public Sector Accounting Standards (PSAS) for its accounting.

The PSAS neither explicitly permits, nor prohibits, the recognition, measurement, presentation or disclosure of rate-regulated activities. In absence of a clear position on an issue, standard accounting practice dictates that an entity is entitled to consult another accounting standard. If I may cite from the PSAS Handbook, Section 1150.18 and 19:

"Paragraphs PS 1150.19-.24 identify some of the other sources that a public sector reporting entity might consult to assist in selecting accounting policies and disclosures that comply with paragraph PS 1150.05. Pronouncements issued by other bodies authorized to issue accounting standards may be useful sources to consult.

For example, accounting pronouncements published with the authority of the Canadian Accounting Standards Board (AcSB), International Accounting Standards Board (IASB), US Federal Accounting Standards Advisory Board (FASAB), US Governmental Accounting Standards Board (GASB), or International Public Sector Accounting Standards Board (IPSASB) are often important sources to consult on matters not covered by primary sources of GAAP or for assistance in applying a primary source of GAAP to specific circumstances."

In this case, IESO consulted US GAAP, the only accounting framework in North America that provides guidance on rate regulated operations. The IESO has since adopted aspects of the US GAAP accounting framework allowing IESO to recognize a regulatory asset.

This decision was supported by an accounting opinion from our external auditors at KPMG and aligns IESO with six of the eight other independent system operators in North America.

It's a decision IESO made after careful consideration and extensive consultation with external experts. In fact, more than one of the big-four accounting firms agree with our decision on this matter. The IESO regularly reviews its accounting policies to ensure our financial reporting best represents our operations and the substance of the accounts we oversee.

Prompted by conversation with government about Ontario's Fair Hydro Plan (OFHP) and recognizing the need to consider impacts of future government policy, IESO revisited its options for reporting market accounts and recognizing regulatory assets.

Working with its audit partner KPMG, IESO determined that there were reporting options for market accounts and regulatory assets and that a choice was required as to whether or not to report these in IESO financial statements.

By analyzing the nature of the accounts, IESO's economic relationship to them, legislative requirements and market rules it was concluded that an appropriate position for either treatment was acceptable.

Organizations in Other Jurisdictions

When we started looking into changes to our accounting policies, we wanted to look at other organizations that have similar mandates to us.

Including IESO, there are 9 independent system operators in North America; seven in the U.S. and two in Canada: The IESO and Alberta's AESO.

We had discussions with these organizations about their operations and accounting practices.

We looked at their location, the accounting framework they follow, the type of organization they are (either not-for-profit or otherwise), whether they are subject to income tax, their capital structure, how they are governed, by which body they are regulated, and finally, whether they recognized balances of market participants and regulatory assets in their financial reporting.

From this research, we found that 7 of the other 8 ISOs recognize the balances of the market participants. They are:

1. **ISO New England**;
2. **NYISO**, in New York;
3. **MISO**, Midcontinent ISO which covers Midwest United States, Manitoba, and much of Arkansas, Mississippi and Louisiana;
4. **PJM**, covering the eastern U.S. states: Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia;
5. **CAISO**, in California;
6. **ERCOT**, in Texas; and
7. **Southwest Power Pool**, in central US.

When we talked to our counterparts across North America about regulatory assets, we found out that 6 of the other 8 entities recognize the economic effects of rate regulation, they are:

1. **AESO**, in Alberta;
2. ISO New England;
3. NYISO;
4. MISO;
5. PJM; and
6. ERCOT.

I should mention that the two ISOs that do not recognize the effect of rate regulation are California ISO (CAISO) and Southwest Power Pool (SPP).

When we talked to CAISO, we found out that their accounting framework actually allows for the recognition of regulatory assets and liabilities, but that it had concluded the need to recognize regulatory assets was no longer necessary.

When we talked to Southwest Power Pool, we learned that they simply do not have any variance accounts that would qualify as regulatory assets or liabilities.

So, when we looked at making the accounting change we considered that:

1. Including **market accounts** on our financial statements would provide increased transparency into the value of transactions that flow through Ontario's \$17 billion electricity market;

2. That **regulatory accounting** better reflected the economic substance of certain types of IESO expenses (like Smart Metering Entity expenses) which are recovered through a rate regulated by the OEB;
3. That the change would **enhance the relevance, transparency and accountability of our financial reporting**;
4. That this change would **bring IESO in line with its peers** across North America; and
5. Finally, that this accounting change would in **no way affect IESO's costs, or have any financial impact on electricity ratepayers** – all these factors confirmed our decision to make the accounting change.

Ultimately, IESO felt the public reporting of market accounts was relevant to the needs of its financial statement users and enabled greater transparency into the market transactions it oversees, which amounted to \$17 billion last year.

We also felt that recognizing regulatory assets would provide more transparency into the substance of the variance accounts we oversee.

As we just covered, this change to recognize regulated assets and market accounts brings IESO in line with accounting practices followed by other independent system operators in North America.

I should also mention, that in the past, the Ontario Power Authority, a predecessor organization of IESO, reported a subset of the market accounts on its financial statements – so this isn't new.

Role of an Independent Audit Firm

To confirm our view that the change was appropriate, IESO engaged independent audit firm KPMG for accounting research on the matter.

KPMG conducted its own research into the issue. KPMG subsequently issued a white paper on the accounting change, supporting IESO's decision to change its accounting policy. The changes were also reviewed with and supported by the Office of the Provincial Controller.

The accounting change was reviewed by IESO's Board of Directors, and approved.

As part of our regular 2016 year-end audit, KPMG issued an accounting opinion on our financial reporting. The accounting firm issued an unqualified or "clean" accounting opinion, meaning they supported the decision.

Finally, when publishing our 2016 financial statements, in order to communicate the change of accounting policy, IESO added additional notes in its 2016 financial

statements to explain the changes in the Summary of Significant Accounting Policies section of its 2016 annual report.

These changes in no way affect IESO's costs, or have any financial impact on electricity ratepayers.

Ultimately, IESO made these changes because it will provide the users of its financial statements greater transparency into the market transactions it oversees, which amounted to \$17 billion last year, and better reflects the economic substance of IESO expenses that are recovered through rate-regulation.

It is KPMG's responsibility to express an opinion on the financial statements based on their audit.

In our case, KPMG conducted their audit in accordance with Canadian generally accepted accounting standards.

Those accounting standards require that the auditors comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the entity's financial statements are free from material misstatement.

Here are some of the things an audit looks into:

- o An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements.
- o The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.
- o In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.

In addition, an audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

In IESO's 2016 financial statements, KPMG stated: "We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion".

This was followed by a statement of their unqualified opinion:

- o In our opinion, the financial statements present fairly, in all material respects, the financial position of IESO as at December 31, 2016, and its results of operations and the changes in its new debt and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

This is taken directly from our 2016 financial statements, which are publically available.

So the “unqualified opinion” is basically accounting-speak to say that the audit partner undertook the thorough audit process, applied the appropriate standards and believes the financial statements follow the appropriate accounting standard and fairly and accurately represent IESO’s financial position at year-end.

KPMG also found that US GAAP was an appropriate accounting framework to look to for guidance on rate-regulated operations, since PSAS was silent on the issue. And that regulatory assets under ASC 980 is not an exemption from the application of US GAAP.

Finally, KPMG’s research also found that the accounting change would bring IESO in line with the majority of its ISO peers across North America.

When we considered the results of our own and KPMG’s research, along with the fact that the change would have no impact on IESO’s costs, or have any financial impact on electricity ratepayers, we went ahead and made the accounting change.

3. To Ontario Power Generation (OPG), can you explain what sort of external expertise OPG enlisted?

And, can you explain what counsel these experts provided with respect to the structure that has been set up and the accounting that will be used?

Response

Ontario Power Generation’s Qualifications

Let me make a few remarks about Ontario Power Generation’s (OPG) qualifications as the financing manager of Ontario’s Fair Hydro Plan.

OPG currently manages a \$20 billion nuclear fund and \$15 billion in pension funds and as an entity regulated by the Ontario Energy Board (OEB), OPG also has extensive experience with regulatory deferral and variance accounts.

In addition, OPG has the breadth and demonstrated track record in the financial markets including the highly successful inaugural public debt offering earlier in October, private placement of insurance linked bonds, participation in securitization programs, and the very successful project debt issuances tied to new hydroelectric developments.

These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these financing structures have resulted in international recognition.

OPG has also developed solid investor relationships and has a large investor base in the structured finance space who would be the target market for financing Ontario's Fair Hydro Plan initiative.

For example, the Lower Mattagami project financing attracted a broad investor base of about 80 institutional investors, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt and three project financing programs totaling more than \$2 billion, as well as two commercial paper programs.

Role of Ontario Power Generation as the Finance Service Manager

OPG is acting as the Finance Service Manager (FSM) as prescribed under the Ontario Fair Hydro legislation, assigned to develop the financing plans and manage the Fair Hydro Trust, which manages the debt obligations associated with Global Adjustment (GA) refinancing.

In December we set up the Fair Hydro Trust, which is ring fenced from the generation activities of OPG in an effort to reflect the unique nature of this business and not co-mingle the operational activities of the two businesses.

The financing requirements are determined by the legislation and the reduction in consumers' bills, and are funded through the Trust.

OPG is responsible for arranging for third party debt to finance the purchase of the regulatory asset from IESO. This funding will be supplemented by both the Province and OPG.

- o The first tranche of public debt was issued in early February 2018.

- o The Trust will continue to borrow funds through the debt markets 3-4 times each year to purchase assets from Independent Electricity System Operate (IESO).

OPG is uniquely positioned to be the financing manager of Ontario's Fair Hydro Plan as we understand the supply and demand characteristics of the market. As previously mentioned, we regularly interact with the Ontario Energy Board (OEB) and the IESO, and we have experience in Treasury operations in the marketplace including relationships with credit rating agencies.

There are three specific areas that we supplemented our team with external resources.

- o First, was legal advice to ensure there is clear alignment between the legislation and the Trust and its related requirements and obligations.
- o The second was financing advice directed at the capital markets again to ensure alignment with the markets focused on achieving the most cost effective financing to ensure the rate payer impact is minimized.
- o The third was accounting advice directed at the set up and governance of the Trust and then to achieve the transparency in reporting that is critical.

Greater Transparency

As has been mentioned OPG has strong capabilities across these areas, but felt it was prudent to ensure that all steps are taken to establish the Trust and its activities in a clear and transparent manner.

The structure that has been set up in fact ensures a high level of transparency.

As these deferred amounts are funded through third party financing, the process by design in financial market space requires disclosure and oversight including credit rating agencies, the OEB, external audit of the Trust itself, additional OPG disclosure in its reports, oversight from lenders through Trust indenture documents.

Ratepayers and taxpayers will be able to clearly see the financial results of the Trust as it relates to the legislation.

Due to OPG's ownership and control over the key activities of the OPG's Fair Hydro Trust, OPG will consolidate the financial results of the Trust in accordance with US GAAP.

OPG will report the financial results of the Trust's operations as part of its regular quarterly and annual reporting process, beginning in March 2018.

The Trust's activities will be clearly reported as a separate segment in OPG's overall results.

OPG's financial reports are audited (currently by ERNST & Young) and filed with the Ontario Securities Commission (OSC) and subject to OSC oversight and a public news release is always issued when the reports are filed.

DRAFT

Ministry of Energy – Proposed Friendly Questions:

- 1. To the Deputy Minister of Energy, why is keeping the financing costs of Ontario's Fair Hydro Plan (OFHP) on the rate-base, as opposed to the tax-base appropriate?**

And, why is Ontario Power Generation (OPG) best placed to minimize the cost of the overall program from your perspective?

Policy Objectives of Ontario's Fair Hydro Plan

Over the last decade Ontario has rebuilt our transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. Ontario's Fair Hydro Plan has introduced new measures to lower electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

To address the impact of our electricity system investments on consumers, Ontario's Fair Hydro Plan includes:

- Refinancing the Global Adjustment (GA) over a longer term period for Regulated Price Plan (RPP) eligible consumers, including families, small businesses and farms.
- Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill. Eligible consumers will receive additional funding through assistance programs including:
 - o Establishing a new Affordability Fund which will support Ontarians who are not eligible for the [Home Assistance Program](#) and who have difficulty paying their electricity bills.

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

o Broadening Rural or Remote Rate Protection (RRRP) to provide distribution charge relief for the customers of the local distribution companies (LDC's) with some of the highest distribution charges.

- Rural or Remote Rate Protection (RRRP) mitigates some of the high costs of electricity distribution in rural or remote areas of the province. It is a legacy program of the old Ontario Hydro and has existed in its current form since 2001. It currently benefits approximately 350,000 customers. Part of the program helps fund the costs of Hydro One customers classified into the "R2" residential rate class (low density), who pay some of the highest delivery costs in

o About 800,000 customers now benefit from the enhanced rate protection. Residential customers from the following LDCs benefit from the broadened rate protection: Hydro One low density (R2) and medium density (R1) customers,, Northern Ontario Wires, Lakeland Power (Parry Sound),, Chapleau Public Utilities Corporation, Sioux Lookout Hydro, InnPower, Atikokan Hydro and Algoma Power.

o Expanding the Ontario Electricity Support Program (OESP) to increase participation and provide further assistance to eligible participants.

- These changes came into effect on May 1, 2017 and included increasing on-bill credits by 50 per cent and expanding eligibility so more Ontarians are eligible.

- This program is available to households that receive electricity bills and meet the household size and income eligibility criteria. Monthly, on-bill credits of \$35-75 are available to eligible applicants, and for those with additional energy needs, the credit ranges from \$52-113.

- In January this year, over 220,000 OESP credits were issued to households across the province.

o Establishing a the new On-Reserve First Nations Delivery Rate Credit.

- Since July 1, 2017, the First Nations Delivery Credit has provided on-reserve First Nations households who are customers of licensed electricity utilities a credit equal to 100 per cent % of the electricity delivery charge on their electricity bills.

Formatted: List Paragraph, Unordered List Level 1, Bullet list, Lettre d'introduction, List Paragraph1, Bullet List 1, Indented Paragraph, Heading 4 test, MOU List Number i, kern at 14 pt, Recommendation, List Paragraph11, L, List Paragraph2, CV text, Table text, table bullets, Space After: 9.6 pt, Add space between paragraphs of the same style, Line spacing: Multiple 1.15 li, Bulleted + Level: 2 + Aligned at: 1.9 cm + Indent at: 2.54 cm, Font Alignment: Baseline, Pattern: Clear (Custom Color(RGB(251,251,251)))

Commented [NM(1): List the LDCs/ eligible customers

Formatted: Indent: Left: 2.54 cm, No bullets or numbering

Formatted

Formatted

Formatted

Commented [NM(2): More detail:
-Program cost, beneficiaries, eligibility ect.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

- The First Nations Delivery Credit helps address some of the unique challenges that on-reserve First Nations customers face and recognizes First Nations' contribution to the provincial electricity system.
- Data reported by the Independent Electricity System Operator indicates that over 20,000 customers are receiving the credit, which was the target pre-launch and reflects a successful rollout.
- Improving sector efficiency and modernizing Ontario's electricity market, working in collaboration with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).
- The government has aligned eligibility for Global Adjustment (GA) refinancing with the Ontario Rebate for Electricity Act, 2016 (ORECA), which provides for the 8 per cent rebate. This means that consumers who are eligible for the 8 per cent rebate are also eligible for Global Adjustment (GA) refinancing, including residential consumers, most small businesses, farms, condominiums, multi-unit residential complexes, long-term care homes and housing cooperatives.
 - o All RPP consumers receive Global Adjustment (GA) refinancing through the Ontario Energy Board's (OEB) RPP rate setting process.
 - o Consumers not participating in RPP but who are eligible for Global Adjustment (GA) refinancing include consumers that have opted out of RPP to sign contracts with electricity retailers or become wholesale consumers, and those who are eligible for ORECA but not RPP, such as long-term care homes. The OEB has determined a GA Modifier to be made to the GA charge on eligible non-RPP consumers' bills.
- Any rate increases over the next four years will be held to the rate of inflation.

In the development of Ontario Fair Hydro Plan, the government made the decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity social programs, such as OESP and RRRP. At the same time, the government also made a policy decision that these new measures would be more appropriately funded from the tax-base, not the rate-base.

If pressed on the cost of these new and enhanced social programs:

On March 2, 2017, the government publicly announced the enhancement of the existing OESP and RRRP and the new Affordability Fund and on-reserve First

Formatted: Space After: 0 pt, Line spacing: single, Font Alignment: Auto, Pattern: Clear

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

Nations delivery credit. At the time, the government indicated that these new measures would cost the government up to \$2.5 billion over the next three years.

Refinancing the Global Adjustment

To reduce pressure on today's electricity consumers, a portion of Global Adjustment (GA) costs is being refinanced. In later years, the cost of financing will be recovered from consumers.

Refinancing the Global Adjustment (GA) is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of Ontario Fair Hydro Plan (OFHP) is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

Ontario's Fair Hydro Plan (OFHP) operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

Development of Ontario Fair Hydro Plan (OFHP)

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options. Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks and take necessary actions to meet the mandate.

The senior officials and staff included:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

The government also consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed. This is normal course of business governments take for complex transactions.

Role of Ontario Power Generation (OPG)

With respect to Ontario Power Generation (OPG), it was identified as the Financial Services Manager (FSM) responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations associated with Global Adjustment (GA) refinancing. Financing requirements are determined by the legislation and will be funded through the Trust.

Ontario Power Generation (OPG) is uniquely positioned to be the Financial Service Manager (FSM), it understands the characteristics of the market, regularly interacts with the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO).

Ontario Power Generation (OPG) has extensive experience in the Ontario energy market, capital markets, regulation and fund management and will ensure that the refinancing will be done in the most efficient and cost-effective manner.

Ontario Power Generation (OPG) currently manages approximately \$20 billion in nuclear funds through the Decommissioning Segregated Fund and the *Used Fuel Segregated Fund* to manage nuclear liabilities, \$15 billion in pension funds and is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience in regulatory deferral and variance accounts.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

*Chapter 2, Public Accounts of the Province
February 2018*

Ontario Power Generation (OPG) has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to Ontario Power Generation (OPG). The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

In addition to executing hundreds of millions in project financing over the past several years, Ontario Power Generation (OPG) completed its first bond offering in the Canadian public market with \$500 million unsecured 10-year bonds in October 2017.

Ontario Power Generation (OPG) has developed solid investor relationships and has a large investor base in the structured finance space that comprises the target market for financing Ontario's Fair Hydro Plan (OFHP) initiative. For example, the Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors, including major investors in the Canadian power and utility bonds markets.

Ontario Power Generation (OPG) has a strong track record of producing high-quality financial reports on a timely basis. In addition, Ontario Power Generation (OPG) will report on the activities of the Fair Hydro Trust in its quarterly financial reporting. The Fair Hydro Trust will be reported as a separate segment in these public documents

In terms of administration, Ontario Power Generation (OPG) is currently managing its own corporate public debt program, three project financing programs totaling more than \$2 billion and two commercial paper programs.

Finally, Ontario Power Generation's (OPG) Treasury functions are well positioned given their management of existing multiple debt programs.

As the implementation of the financing program progresses, focus has remained on minimizing costs to ratepayers. Particular attention has been given to achieving a strong credit rating for the Trust, with the objective of mitigating the impact to ratepayers through effective market pricing of the funds being borrowed by the Trust.

Ontario Fair Hydro Plan (OFHP) is delivering much-needed rate relief to electricity consumers. The policy decisions we have made in implementing Global Adjustment (GA) refinancing, in consultation with third-party experts, senior officials and staff from across government, most effectively achieve the policy goals of the refinancing program and ensure that the cost of important investments in the electricity system are allocated fairly amongst electricity consumers in proportion to the benefit from received from them.

2. To Independent Electricity System Operator (IESO), how did IESO come to the conclusion that it was acceptable to use US Generally Accepted Accounting Principles (GAAP) instead of Public Sector Accounting Standards (PSAS) for rate regulated activities?

And, is there a clause or section of PSAS that permits the use of GAAP in a given scenario?

Response

Independent Electricity System Operator's Approach to Accounting

The Independent Electricity System Operator (IESO) follows Public Sector Accounting Standards (PSAS) for its accounting.

The PSAS neither explicitly permits, nor prohibits, the recognition, measurement, presentation or disclosure of rate-regulated activities. In absence of a clear position on an issue, standard accounting practice dictates that an entity is entitled to consult another accounting standard. If I may cite from the PSAS Handbook, Section 1150.18 and 19:

"Paragraphs PS 1150.19-.24 identify some of the other sources that a public sector reporting entity might consult to assist in selecting accounting policies and disclosures that comply with paragraph PS 1150.05. Pronouncements issued by other bodies authorized to issue accounting standards may be useful sources to consult.

For example, accounting pronouncements published with the authority of the Canadian Accounting Standards Board (AcSB), International Accounting Standards Board (IASB), US Federal Accounting Standards Advisory Board (FASAB), US Governmental Accounting Standards Board (GASB), or International Public Sector Accounting Standards Board (IPSASB) are often important sources to consult on matters not covered by primary sources of GAAP or for assistance in applying a primary source of GAAP to specific circumstances."

In this case, IESO consulted US GAAP, the only accounting framework in North America that provides guidance on rate regulated operations. The IESO has since adopted aspects of the US GAAP accounting framework allowing IESO to recognize a regulatory asset.

This decision was supported by an accounting opinion from our external auditors at KPMG and aligns IESO with six of the eight other independent system operators in North America.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

It's a decision IESO made after careful consideration and extensive consultation with external experts. In fact, more than one of the big-four accounting firms agree with our decision on this matter. The IESO regularly reviews its accounting policies to ensure our financial reporting best represents our operations and the substance of the accounts we oversee.

Prompted by conversation with government about Ontario's Fair Hydro Plan (OFHP) and recognizing the need to consider impacts of future government policy, IESO revisited its options for reporting market accounts and recognizing regulatory assets.

Working with its audit partner KPMG, IESO determined that there were reporting options for market accounts and regulatory assets and that a choice was required as to whether or not to report these in IESO financial statements.

By analyzing the nature of the accounts, IESO's economic relationship to them, legislative requirements and market rules it was concluded that an appropriate position for either treatment was acceptable.

Organizations in Other Jurisdictions

When we started looking into changes to our accounting policies, we wanted to look at other organizations that have similar mandates to us.

Including IESO, there are 9 independent system operators in North America; seven in the U.S. and two in Canada: The IESO and Alberta's AESO.

We had discussions with these organizations about their operations and accounting practices.

We looked at their location, the accounting framework they follow, the type of organization they are (either not-for-profit or otherwise), whether they are subject to income tax, their capital structure, how they are governed, by which body they are regulated, and finally, whether they recognized balances of market participants and regulatory assets in their financial reporting.

From this research, we found that 7 of the other 8 ISOs recognize the balances of the market participants. They are:

1. **ISO New England;**
2. **NYISO**, in New York;
3. **MISO**, Midcontinent ISO which covers Midwest United States, Manitoba, and much of Arkansas, Mississippi and Louisiana;
4. **PJM**, covering the eastern U.S. states: Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio,

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia;

5. **CAISO**, in California;
6. **ERCOT**, in Texas; and
7. **Southwest Power Pool**, in central US.

When we talked to our counterparts across North America about regulatory assets, we found out that 6 of the other 8 entities recognize the economic effects of rate regulation, they are:

1. **AESO**, in Alberta;
2. ISO New England;
3. NYISO;
4. MISO;
5. PJM; and
6. ERCOT.

I should mention that the two ISOs that do not recognize the effect of rate regulation are California ISO (CAISO) and Southwest Power Pool (SPP).

When we talked to CAISO, we found out that their accounting framework actually allows for the recognition of regulatory assets and liabilities, but that it had concluded the need to recognize regulatory assets was no longer necessary.

When we talked to Southwest Power Pool, we learned that they simply do not have any variance accounts that would qualify as regulatory assets or liabilities.

So, when we looked at making the accounting change we considered that:

1. Including **market accounts** on our financial statements would provide increased transparency into the value of transactions that flow through Ontario's \$17 billion electricity market;
2. That **regulatory accounting** better reflected the economic substance of certain types of IESO expenses (like Smart Metering Entity expenses) which are recovered through a rate regulated by the OEB;
3. That the change would **enhance the relevance, transparency and accountability of our financial reporting**;
4. That this change would **bring IESO in line with its peers** across North America; and

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

5. Finally, that this accounting change would in **no way affect IESO's costs, or have any financial impact on electricity ratepayers** – all these factors confirmed our decision to make the accounting change.

Ultimately, IESO felt the public reporting of market accounts was relevant to the needs of its financial statement users and enabled greater transparency into the market transactions it oversees, which amounted to \$17 billion last year.

We also felt that recognizing regulatory assets would provide more transparency into the substance of the variance accounts we oversee.

As we just covered, this change to recognize regulated assets and market accounts brings IESO in line with accounting practices followed by other independent system operators in North America.

I should also mention, that in the past, the Ontario Power Authority, a predecessor organization of IESO, reported a subset of the market accounts on its financial statements – so this isn't new.

Role of an Independent Audit Firm

To confirm our view that the change was appropriate, IESO engaged independent audit firm KPMG for accounting research on the matter.

KPMG conducted its own research into the issue. KPMG subsequently issued a white paper on the accounting change, supporting IESO's decision to change its accounting policy. The changes were also reviewed with and supported by the Office of the Provincial Controller.

The accounting change was reviewed by IESO's Board of Directors, and approved.

As part of our regular 2016 year-end audit, KPMG issued an accounting opinion on our financial reporting. The accounting firm issued an unqualified or "clean" accounting opinion, meaning they supported the decision.

Finally, when publishing our 2016 financial statements, in order to communicate the change of accounting policy, IESO added additional notes in its 2016 financial statements to explain the changes in the Summary of Significant Accounting Policies section of its 2016 annual report.

These changes in no way affect IESO's costs, or have any financial impact on electricity ratepayers.

Ultimately, IESO made these changes because it will provide the users of its financial statements greater transparency into the market transactions it oversees,

STANDING COMMITTEE ON PUBLIC ACCOUNTS

*Chapter 2, Public Accounts of the Province
February 2018*

which amounted to \$17 billion last year, and better reflects the economic substance of IESO expenses that are recovered through rate-regulation.

It is KPMG's responsibility to express an opinion on the financial statements based on their audit.

In our case, KPMG conducted their audit in accordance with Canadian generally accepted accounting standards.

Those accounting standards require that the auditors comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the entity's financial statements are free from material misstatement.

Here are some of the things an audit looks into:

- An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements.
- The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.
- In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.

In addition, an audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

In IESO's 2016 financial statements, KPMG stated: "We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion".

This was followed by a statement of their unqualified opinion:

- In our opinion, the financial statements present fairly, in all material respects, the financial position of IESO as at December 31, 2016, and its results of operations and the changes in its new debt and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

This is taken directly from our 2016 financial statements, which are publically available.

So the “unqualified opinion” is basically accounting-speak to say that the audit partner undertook the thorough audit process, applied the appropriate standards and believes the financial statements follow the appropriate accounting standard and fairly and accurately represent IESO’s financial position at year-end.

KPMG also found that US GAAP was an appropriate accounting framework to look to for guidance on rate-regulated operations, since PSAS was silent on the issue. And that regulatory assets under ASC 980 is not an exemption from the application of US GAAP.

Finally, KPMG’s research also found that the accounting change would bring IESO in line with the majority of its ISO peers across North America.

When we considered the results of our own and KPMG’s research, along with the fact that the change would have no impact on IESO’s costs, or have any financial impact on electricity ratepayers, we went ahead and made the accounting change.

3. To Ontario Power Generation (OPG), can you explain what sort of external expertise OPG enlisted?

And, can you explain what counsel these experts provided with respect to the structure that has been set up and the accounting that will be used?

Response

Ontario Power Generation’s Qualifications

Let me make a few remarks about Ontario Power Generation’s (OPG) qualifications as the financing manager of Ontario’s Fair Hydro Plan.

OPG currently manages a \$20 billion nuclear fund and \$15 billion in pension funds and as an entity regulated by the Ontario Energy Board (OEB), OPG also has extensive experience with regulatory deferral and variance accounts.

In addition, OPG has the breadth and demonstrated track record in the financial markets including the highly successful inaugural public debt offering earlier in October, private placement of insurance linked bonds, participation in securitization programs, and the very successful project debt issuances tied to new hydroelectric developments.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these financing structures have resulted in international recognition.

OPG has also developed solid investor relationships and has a large investor base in the structured finance space who would be the target market for financing Ontario's Fair Hydro Plan initiative.

For example, the Lower Mattagami project financing attracted a broad investor base of about 80 institutional investors, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt and three project financing programs totaling more than \$2 billion, as well as two commercial paper programs.

Role of Ontario Power Generation as the Finance Service Manager

OPG is acting as the Finance Service Manager (FSM) as prescribed under the Ontario Fair Hydro legislation, assigned to develop the financing plans and manage the Fair Hydro Trust, which manages the debt obligations associated with Global Adjustment (GA) refinancing.

In December we set up the Fair Hydro Trust, which is ring fenced from the generation activities of OPG in an effort to reflect the unique nature of this business and not co-mingle the operational activities of the two businesses.

The financing requirements are determined by the legislation and the reduction in consumers' bills, and are funded through the Trust.

OPG is responsible for arranging for third party debt to finance the purchase of the regulatory asset from IESO. This funding will be supplemented by both the Province and OPG.

- The first tranche of public debt was issued in early February 2018.
- The Trust will continue to borrow funds through the debt markets 3-4 times each year to purchase assets from Independent Electricity System Operator (IESO).

OPG is uniquely positioned to be the financing manager of Ontario's Fair Hydro Plan as we understand the supply and demand characteristics of the market. As previously mentioned, we regularly interact with the Ontario Energy Board (OEB) and the IESO, and we have experience in Treasury operations in the marketplace including relationships with credit rating agencies.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

There are three specific areas that we supplemented our team with external resources.

- First, was legal advice to ensure there is clear alignment between the legislation and the Trust and its related requirements and obligations.
- The second was financing advice directed at the capital markets again to ensure alignment with the markets focused on achieving the most cost effective financing to ensure the rate payer impact is minimized.
- The third was accounting advice directed at the set up and governance of the Trust and then to achieve the transparency in reporting that is critical.

Greater Transparency

As has been mentioned OPG has strong capabilities across these areas, but felt it was prudent to ensure that all steps are taken to establish the Trust and its activities in a clear and transparent manner.

The structure that has been set up in fact ensures a high level of transparency.

As these deferred amounts are funded through third party financing, the process by design in financial market space requires disclosure and oversight including credit rating agencies, the OEB, external audit of the Trust itself, additional OPG disclosure in its reports, oversight from lenders through Trust indenture documents.

Ratepayers and taxpayers will be able to clearly see the financial results of the Trust as it relates to the legislation.

Due to OPG's ownership and control over the key activities of the OPG's Fair Hydro Trust, OPG will consolidate the financial results of the Trust in accordance with US GAAP.

OPG will report the financial results of the Trust's operations as part of its regular quarterly and annual reporting process, beginning in March 2018.

The Trust's activities will be clearly reported as a separate segment in OPG's overall results.

OPG's financial reports are audited (currently by ERNST & Young) and filed with the Ontario Securities Commission (OSC) and subject to OSC oversight and a public news release is always issued when the reports are filed.

Ministry of Energy – Proposed Member Questions:

- 1. To the Deputy Minister of Energy, why is keeping the financing costs of Ontario's Fair Hydro Plan (OFHP) on the rate-base, as opposed to the tax-base appropriate?**

And, why is Ontario Power Generation (OPG) best placed to minimize the cost of the overall program from your perspective?

Thank you for the question.

In responding to the question I'd like to give some background and the evolution of Ontario's electricity sector to provide some important context for Ontario's Fair Hydro Plan.

Over the last decade Ontario has rebuilt our transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable. The funding for this investment mostly recovered through the Global Adjustment (GA).

Ontario's Fair Hydro Plan has introduced new measures to lower electricity bills by 25% on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

In the development of Ontario's Fair Hydro Plan, the government made the decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity social programs, such as the Ontario Electricity Support Program (OESP) and the Rural or Remote Rate Protection (RRRP) program. At the same time, the government also made a policy decision that these new measures would be more appropriately funded from the tax-base, not the rate-base. In addition, a policy decision was made to refinance the Global Adjustment over a longer amortization period that better reflects the life of the assets.

To better understand Ontario's Fair Hydro Plan, it is important to unpack the key components of the plan in more detail. I like to group these components into three buckets:

The first bucket is the Ontario Rebate for Electricity Consumers (OREC) program

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

The second bucket is enhancing electricity support programs and shifting costs off the electricity bill from the ratebase to the tax base.

The third bucket is refinancing the Global Adjustment (GA) over a longer term period of time to better align cost recovery with the useful life of generation assets.

Now, I'll go into more detail on each of the three buckets:

On January 1, 2017, the government introduced the Ontario Rebate for Electricity Consumers program which provides financial assistance to eligible consumers in respect of electricity costs. The rebate is equal to eight per cent (8%) of the base invoice amount which is equivalent to the provincial portion of the Harmonized Sales Tax (HST) on the bills of residential, farm, small business and other eligible customers. This provides an average savings of approximately \$130 annually or \$11 each month. The rebate is available to all consumers eligible for the Regulated Price Plan (RPP) – this includes nearly five million residential consumers, small businesses and farms.

- The OREC has an approved 2017-18 expenditure of \$939 million.

The second bucket of initiatives consists of enhancing electricity social programs and shifting costs to the taxbase.

Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill. Eligible electricity consumers will receive additional support through the following programs:

- A new Affordability Fund which will support Ontarians who are not eligible for the [Home Assistance Program](#) and who have difficulty paying their electricity bills.
 - o About 800,000 customers now benefit from the enhanced rate protection. Residential customers from the following LDCs benefit from the broadened rate protection: Hydro One low density (R2) and medium density (R1) customers,, Northern Ontario Wires, Lakeland Power (Parry Sound),), Chapleau Public Utilities Corporation, Sioux Lookout Hydro, InnPower, Atikokan Hydro and Algoma Power.
- Expanding the Ontario Electricity Support Program (OESP) to increase participation and provide further assistance to eligible participants.
 - o These changes came into effect on May 1, 2017 and included increasing on-bill credits by 50 per cent and expanding eligibility so more Ontarians are eligible.

- o This program is available to households that receive electricity bills and meet the household size and income eligibility criteria. Monthly, on-bill credits of \$35-75 are available to eligible applicants, and for those with additional energy needs, the credit ranges from \$52-113.
- In January this year, over 220,000 OESP credits were issued to households across the province.
- Since July 1, 2017, the First Nations Delivery Credit has provided on-reserve First Nations households who are customers of licensed electricity utilities a credit equal to 100 per cent of the electricity delivery charge on their electricity bills.
 - o The First Nations Delivery Credit helps address some of the unique challenges that on-reserve First Nations customers face and recognizes First Nations' contribution to the provincial electricity system.
 - o Data reported by the Independent Electricity System Operator indicates that over 20,000 customers are receiving the credit, which was the target pre-launch and reflects a successful rollout.

All of these new and enhanced rate mitigation programs in the two buckets are funded by the taxbase at total cost of about \$1.5 billion annually.

And now I'd like to discuss the third bucket – refinancing the global adjustment.

To reduce pressure on today's electricity consumers, a portion of Global Adjustment (GA) costs is being refinanced. In later years, the cost of the re-financing will be recovered from electricity consumers and not taxpayers.

Refinancing the Global Adjustment (GA) is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that have been made to build a clean and reliable electricity system. This more fairly shares the cost of these investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of Ontario's Fair Hydro Plan is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

Development of Ontario's Fair Hydro Plan (OFHP)

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options, including the appropriate life of the assets and amortization period. Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks and take necessary actions to meet the mandate.

The senior officials and staff included:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

The government also consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed. This is normal course of business governments take for complex transactions.

Role of Ontario Power Generation (OPG)

With respect to Ontario Power Generation (OPG), it was identified as the Financial Services Manager (FSM) responsible for the financing plans and the financing entity (i.e., Fair Hydro Trust) that will manage the debt obligations associated with Global

Adjustment refinancing. Financing requirements are determined by the legislation and will be funded through the Trust.

Ontario Power Generation (OPG) is uniquely positioned to be the Financial Service Manager (FSM), it understands the characteristics of the market, regularly interacts with the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO).

Ontario Power Generation (OPG) has extensive experience in the Ontario energy market, capital markets, regulation and fund management and will ensure that the refinancing will be done in the most efficient and cost-effective manner.

Ontario Power Generation (OPG) currently manages approximately \$20 billion in nuclear funds through the Decommissioning Segregated Fund and the *Used Fuel Segregated Fund* to manage nuclear liabilities, \$15 billion in pension funds and is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience in regulatory deferral and variance accounts.

Ontario Power Generation (OPG) has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to Ontario Power Generation (OPG). The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

In addition to executing hundreds of millions in project financing over the past several years, Ontario Power Generation (OPG) completed its first bond offering in the Canadian public market with \$500 million unsecured 10-year bonds in October 2017.

Ontario Power Generation (OPG) has developed solid investor relationships and has a large investor base in the structured finance space that comprises the target market for financing Ontario's Fair Hydro Plan (OFHP) initiative. For example, the Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors, including major investors in the Canadian power and utility bonds markets.

OPG has a strong track record of producing high-quality financial reports on a timely basis. In addition, OPG will report on the activities of the Fair Hydro Trust in its quarterly financial reporting. The Fair Hydro Trust will be reported as a separate segment in these public documents

In terms of administration, OPG is currently managing its own corporate public debt program, three project financing programs totaling more than \$2 billion and two commercial paper programs.

Finally, Ontario Power Generation's (OPG) Treasury functions are well positioned given their management of existing multiple debt programs.

As the implementation of the financing program progresses, focus has remained on minimizing costs to ratepayers. Particular attention has been given to achieving a strong credit rating for the Trust, with the objective of mitigating the impact to ratepayers through effective market pricing of the funds being borrowed by the Trust.

Ontario Fair Hydro Plan (OFHP) is delivering much-needed rate relief to electricity consumers. The policy decisions we have made in implementing Global Adjustment (GA) refinancing, in consultation with third-party experts, senior officials and staff from across government, most effectively achieve the policy goals of the refinancing program and ensure that the cost of important investments in the electricity system are allocated fairly amongst electricity consumers in proportion to the benefit from received from them.

- 1. To Independent Electricity System Operator (IESO), how did IESO come to the conclusion that it was acceptable to use US Generally Accepted Accounting Principles (GAAP) instead of Public Sector Accounting Standards (PSAS) for rate regulated activities?**

And, is there a clause or section of PSAS that permits the use of GAAP in a given scenario?

Response

Independent Electricity System Operator's Approach to Accounting

The Independent Electricity System Operator (IESO) follows Public Sector Accounting Standards (PSAS) for its accounting.

The PSAS neither explicitly permits, nor prohibits, the recognition, measurement, presentation or disclosure of rate-regulated activities. In absence of a clear position on an issue, standard accounting practice dictates that an entity is entitled to consult another accounting standard. If I may cite from the PSAS Handbook, Section 1150.18 and 19:

"Paragraphs PS 1150.19-24 identify some of the other sources that a public sector reporting entity might consult to assist in selecting

accounting policies and disclosures that comply with paragraph PS 1150.05. Pronouncements issued by other bodies authorized to issue accounting standards may be useful sources to consult.

For example, accounting pronouncements published with the authority of the Canadian Accounting Standards Board (AcSB), International Accounting Standards Board (IASB), US Federal Accounting Standards Advisory Board (FASAB), US Governmental Accounting Standards Board (GASB), or International Public Sector Accounting Standards Board (IPSASB) are often important sources to consult on matters not covered by primary sources of GAAP or for assistance in applying a primary source of GAAP to specific circumstances.”

In this case, IESO consulted US GAAP, the only accounting framework in North America that provides guidance on rate regulated operations. The IESO has since adopted aspects of the US GAAP accounting framework allowing IESO to recognize a regulatory asset.

This decision was supported by an accounting opinion from our external auditors at KPMG and aligns IESO with six of the eight other independent system operators in North America.

It's a decision IESO made after careful consideration and extensive consultation with external experts. In fact, more than one of the big-four accounting firms agree with our decision on this matter. The IESO regularly reviews its accounting policies to ensure our financial reporting best represents our operations and the substance of the accounts we oversee.

Prompted by conversation with government about Ontario's Fair Hydro Plan (OFHP) and recognizing the need to consider impacts of future government policy, IESO revisited its options for reporting market accounts and recognizing regulatory assets.

Working with its audit partner KPMG, IESO determined that there were reporting options for market accounts and regulatory assets and that a choice was required as to whether or not to report these in IESO financial statements.

By analyzing the nature of the accounts, IESO's economic relationship to them, legislative requirements and market rules it was concluded that an appropriate position for either treatment was acceptable.

Organizations in Other Jurisdictions

When we started looking into changes to our accounting policies, we wanted to look at other organizations that have similar mandates to us.

Including IESO, there are 9 independent system operators in North America; seven in the U.S. and two in Canada: The IESO and Alberta's AESO.

We had discussions with these organizations about their operations and accounting practices.

We looked at their location, the accounting framework they follow, the type of organization they are (either not-for-profit or otherwise), whether they are subject to income tax, their capital structure, how they are governed, by which body they are regulated, and finally, whether they recognized balances of market participants and regulatory assets in their financial reporting.

From this research, we found that 7 of the other 8 ISOs recognize the balances of the market participants. They are:

1. **ISO New England;**
2. **NYISO**, in New York;
3. **MISO**, Midcontinent ISO which covers Midwest United States, Manitoba, and much of Arkansas, Mississippi and Louisiana;
4. **PJM**, covering the eastern U.S. states: Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia;
5. **CAISO**, in California;
6. **ERCOT**, in Texas; and
7. **Southwest Power Pool**, in central US.

When we talked to our counterparts across North America about regulatory assets, we found out that 6 of the other 8 entities recognize the economic effects of rate regulation, they are:

1. **AESO**, in Alberta;
2. ISO New England;
3. NYISO;
4. MISO;
5. PJM; and
6. ERCOT.

I should mention that the two ISOs that do not recognize the effect of rate regulation are California ISO (CAISO) and Southwest Power Pool (SPP).

When we talked to CAISO, we found out that their accounting framework actually allows for the recognition of regulatory assets and liabilities, but that it had concluded the need to recognize regulatory assets was no longer necessary.

When we talked to Southwest Power Pool, we learned that they simply do not have any variance accounts that would qualify as regulatory assets or liabilities.

So, when we looked at making the accounting change we considered that:

1. Including **market accounts** on our financial statements would provide increased transparency into the value of transactions that flow through Ontario's \$17 billion electricity market;
2. That **regulatory accounting** better reflected the economic substance of certain types of IESO expenses (like Smart Metering Entity expenses) which are recovered through a rate regulated by the OEB;
3. That the change would **enhance the relevance, transparency and accountability of our financial reporting**;
4. That this change would **bring IESO in line with its peers** across North America; and
5. Finally, that this accounting change would in **no way affect IESO's costs, or have any financial impact on electricity ratepayers** – all these factors confirmed our decision to make the accounting change.

Ultimately, IESO felt the public reporting of market accounts was relevant to the needs of its financial statement users and enabled greater transparency into the market transactions it oversees, which amounted to \$17 billion last year.

We also felt that recognizing regulatory assets would provide more transparency into the substance of the variance accounts we oversee.

As we just covered, this change to recognize regulated assets and market accounts brings IESO in line with accounting practices followed by other independent system operators in North America.

I should also mention, that in the past, the Ontario Power Authority, a predecessor organization of IESO, reported a subset of the market accounts on its financial statements – so this isn't new.

Role of an Independent Audit Firm

To confirm our view that the change was appropriate, IESO engaged independent audit firm KPMG for accounting research on the matter.

KPMG conducted its own research into the issue. KPMG subsequently issued a white paper on the accounting change, supporting IESO's decision to change its accounting policy. The changes were also reviewed with and supported by the Office of the Provincial Controller.

The accounting change was reviewed by IESO's Board of Directors, and approved.

As part of our regular 2016 year-end audit, KPMG issued an accounting opinion on our financial reporting. The accounting firm issued an unqualified or "clean" accounting opinion, meaning they supported the decision.

Finally, when publishing our 2016 financial statements, in order to communicate the change of accounting policy, IESO added additional notes in its 2016 financial statements to explain the changes in the Summary of Significant Accounting Policies section of its 2016 annual report.

These changes in no way affect IESO's costs, or have any financial impact on electricity ratepayers.

Ultimately, IESO made these changes because it will provide the users of its financial statements greater transparency into the market transactions it oversees, which amounted to \$17 billion last year, and better reflects the economic substance of IESO expenses that are recovered through rate-regulation.

It is KPMG's responsibility to express an opinion on the financial statements based on their audit.

In our case, KPMG conducted their audit in accordance with Canadian generally accepted accounting standards.

Those accounting standards require that the auditors comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the entity's financial statements are free from material misstatement.

Here are some of the things an audit looks into:

- An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements.
- The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.
- In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial

statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.

In addition, an audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

In IESO's 2016 financial statements, KPMG stated: "We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion".

This was followed by a statement of their unqualified opinion:

- In our opinion, the financial statements present fairly, in all material respects, the financial position of IESO as at December 31, 2016, and its results of operations and the changes in its new debt and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

This is taken directly from our 2016 financial statements, which are publically available.

So the "unqualified opinion" is basically accounting-speak to say that the audit partner undertook the thorough audit process, applied the appropriate standards and believes the financial statements follow the appropriate accounting standard and fairly and accurately represent IESO's financial position at year-end.

KPMG also found that US GAAP was an appropriate accounting framework to look to for guidance on rate-regulated operations, since PSAS was silent on the issue. And that regulatory assets under ASC 980 is not an exemption from the application of US GAAP.

Finally, KPMG's research also found that the accounting change would bring IESO in line with the majority of its ISO peers across North America.

When we considered the results of our own and KPMG's research, along with the fact that the change would have no impact on IESO's costs, or have any financial impact on electricity ratepayers, we went ahead and made the accounting change.

2. To Ontario Power Generation (OPG), can you explain what sort of external expertise OPG enlisted?

And, can you explain what counsel these experts provided with respect to the structure that has been set up and the accounting that will be used?

Response

Ontario Power Generation's Qualifications

Let me make a few remarks about Ontario Power Generation's (OPG) qualifications as the financing manager of Ontario's Fair Hydro Plan.

OPG currently manages a \$20 billion nuclear fund and \$15 billion in pension funds and as an entity regulated by the Ontario Energy Board (OEB), OPG also has extensive experience with regulatory deferral and variance accounts.

In addition, OPG has the breadth and demonstrated track record in the financial markets including the highly successful inaugural public debt offering earlier in October, private placement of insurance linked bonds, participation in securitization programs, and the very successful project debt issuances tied to new hydroelectric developments.

These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these financing structures have resulted in international recognition.

OPG has also developed solid investor relationships and has a large investor base in the structured finance space who would be the target market for financing Ontario's Fair Hydro Plan initiative.

For example, the Lower Mattagami project financing attracted a broad investor base of about 80 institutional investors, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt and three project financing programs totaling more than \$2 billion, as well as two commercial paper programs.

Role of Ontario Power Generation as the Finance Service Manager

OPG is acting as the Finance Service Manager (FSM) as prescribed under the Ontario Fair Hydro legislation, assigned to develop the financing plans and manage the Fair Hydro Trust, which manages the debt obligations associated with Global Adjustment (GA) refinancing.

In December we set up the Fair Hydro Trust, which is ring fenced from the generation activities of OPG in an effort to reflect the unique nature of this business and not co-mingle the operational activities of the two businesses.

The financing requirements are determined by the legislation and the reduction in consumers' bills, and are funded through the Trust.

OPG is responsible for arranging for third party debt to finance the purchase of the regulatory asset from IESO. This funding will be supplemented by both the Province and OPG.

- The first tranche of public debt was issued in early February 2018.
- The Trust will continue to borrow funds through the debt markets 3-4 times each year to purchase assets from Independent Electricity System Operator (IESO).

OPG is uniquely positioned to be the financing manager of Ontario's Fair Hydro Plan as we understand the supply and demand characteristics of the market. As previously mentioned, we regularly interact with the Ontario Energy Board (OEB) and the IESO, and we have experience in Treasury operations in the marketplace including relationships with credit rating agencies.

There are three specific areas that we supplemented our team with external resources.

- First, was legal advice to ensure there is clear alignment between the legislation and the Trust and its related requirements and obligations.
- The second was financing advice directed at the capital markets again to ensure alignment with the markets focused on achieving the most cost effective financing to ensure the rate payer impact is minimized.
- The third was accounting advice directed at the set up and governance of the Trust and then to achieve the transparency in reporting that is critical.

Greater Transparency

As has been mentioned OPG has strong capabilities across these areas, but felt it was prudent to ensure that all steps are taken to establish the Trust and its activities in a clear and transparent manner.

The structure that has been set up in fact ensures a high level of transparency.

As these deferred amounts are funded through third party financing, the process by design in financial market space requires disclosure and oversight including credit rating agencies, the OEB, external audit of the Trust itself, additional OPG disclosure in its reports, oversight from lenders through Trust indenture documents.

Ratepayers and taxpayers will be able to clearly see the financial results of the Trust as it relates to the legislation.

Due to OPG's ownership and control over the key activities of the OPG's Fair Hydro Trust, OPG will consolidate the financial results of the Trust in accordance with US GAAP.

OPG will report the financial results of the Trust's operations as part of its regular quarterly and annual reporting process, beginning in March 2018.

The Trust's activities will be clearly reported as a separate segment in OPG's overall results.

OPG's financial reports are audited (currently by ERNST & Young) and filed with the Ontario Securities Commission (OSC) and subject to OSC oversight and a public news release is always issued when the reports are filed.

Ministry of Energy – Proposed Member Questions:

- 1. To the Deputy Minister of Energy, why is keeping the financing costs of Ontario's Fair Hydro Plan (OFHP) on the rate-base, as opposed to the tax-base appropriate?**

And, why is Ontario Power Generation (OPG) best placed to minimize the cost of the overall program from your perspective?

Thank you for the question.

In responding to the question I'd like to give some background and the evolution of Ontario's electricity sector to provide some important context for ~~the OFHP~~Ontario's Fair Hydro Plan.

Over the last decade Ontario has rebuilt our transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable. The funding for this investment mostly recovered through the Global Adjustment (GA).

Ontario's Fair Hydro Plan has introduced new measures to lower electricity bills by 25% per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

In the development of Ontario's Fair Hydro Plan, the government made the decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity social programs, such as the Ontario Electricity Support Program (OESP) and the Rural or Remote Rate Protection (RRRP) program. At the same time, the government also made a policy decision that these new measures would be more appropriately funded from the tax-base, not the rate-base. In addition, a policy decision was made to refinance the Global Adjustment over a longer amortization period that better reflects the life of the assets.

To better understand ~~the~~ Ontario's Fair Hydro Plan, it is important to unpack the key components of the plan in more detail. I like to group these components into three buckets:

The first bucket is the Ontario Rebate for Electricity Consumers (OREC) program

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

The second bucket is enhancing electricity support programs and shifting costs off the electricity bill from the ratebase to the tax base.

The third bucket is refinancing the Global Adjustment (GA) over a longer term period of time to better align cost recovery with the useful life of generation assets.

Now, I'll go into more detail on each of the three buckets:

On January 1, 2017, the government introduced the Ontario Rebate for Electricity Consumers program which provides financial assistance to eligible consumers in respect of electricity costs. The rebate is equal to eight per cent (8%) of the base invoice amount which is equivalent to the provincial portion of the Harmonized Sales Tax (HST) on the bills of residential, farm, small business and other eligible customers. ~~That's an 8% rebate~~ This provides an average savings of approximately \$130 annually or \$11 each month. The rebate is available to all consumers eligible for the Regulated Price Plan (RPP) – this includes ~~about nearly~~ five million residential consumers, small businesses and farms.

- The OREC has an approved 2017-18 expenditure of \$939 ~~million~~ [M](#).

The second bucket of initiatives consists of enhancing electricity social programs and shifting costs to the taxbase.

Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill. Eligible electricity consumers will receive additional support through the following programs:

- A new Affordability Fund which will support Ontarians who are not eligible for the [Home Assistance Program](#) and who have difficulty paying their electricity bills.
 - o About 800,000 customers now benefit from the enhanced rate protection. Residential customers from the following LDCs benefit from the broadened rate protection: Hydro One low density (R2) and medium density (R1) customers,, Northern Ontario Wires, Lakeland Power (Parry Sound),), Chapleau Public Utilities Corporation, Sioux Lookout Hydro, InnPower, Atikokan Hydro and Algoma Power.
 - Expanding the Ontario Electricity Support Program (OESP) to increase participation and provide further assistance to eligible participants.
 - o These changes came into effect on May 1, 2017 and included increasing on-bill credits by 50 per cent and expanding eligibility so more Ontarians are eligible.

- o This program is available to households that receive electricity bills and meet the household size and income eligibility criteria. Monthly, on-bill credits of \$35-75 are available to eligible applicants, and for those with additional energy needs, the credit ranges from \$52-113.
- In January this year, over 220,000 OESP credits were issued to households across the province.
- Since July 1, 2017, the First Nations Delivery Credit has provided on-reserve First Nations households who are customers of licensed electricity utilities a credit equal to 100 per cent of the electricity delivery charge on their electricity bills.
 - o The First Nations Delivery Credit helps address some of the unique challenges that on-reserve First Nations customers face and recognizes First Nations' contribution to the provincial electricity system.
 - o Data reported by the Independent Electricity System Operator indicates that over 20,000 customers are receiving the credit, which was the target pre-launch and reflects a successful rollout.

All of these new and enhanced rate mitigation programs in the two buckets are funded by the taxbase at total cost of about \$1.5 billion annually.

And now I'd like to discuss the third bucket – refinancing the global adjustment.

To reduce pressure on today's electricity consumers, a portion of Global Adjustment (GA) costs is being refinanced. In later years, the cost of the re-financing will be recovered from electricity consumers and not taxpayers.

Refinancing the Global Adjustment (GA) is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that have been made to build a clean and reliable electricity system. This more fairly shares the cost of these investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of Ontario's Fair Hydro Plan (OFHP) is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

Development of Ontario's Fair Hydro Plan (OFHP)

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options, including the appropriate life of the assets and amortization period. Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks and take necessary actions to meet the mandate.

The senior officials and staff included:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

The government also consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed. This is normal course of business governments take for complex transactions.

Role of Ontario Power Generation (OPG)

With respect to Ontario Power Generation (OPG), it was identified as the Financial Services Manager (FSM) responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan-Trust) that will manage the debt obligations associated with

Global Adjustment refinancing. Financing requirements are determined by the legislation and will be funded through the Trust.

Ontario Power Generation (OPG) is uniquely positioned to be the Financial Service Manager (FSM), it understands the characteristics of the market, regularly interacts with the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO).

Ontario Power Generation (OPG) has extensive experience in the Ontario energy market, capital markets, regulation and fund management and will ensure that the refinancing will be done in the most efficient and cost-effective manner.

Ontario Power Generation (OPG) currently manages approximately \$20 billion in nuclear funds through the Decommissioning Segregated Fund and the *Used Fuel Segregated Fund* to manage nuclear liabilities, \$15 billion in pension funds and is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience in regulatory deferral and variance accounts.

Ontario Power Generation (OPG) has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to Ontario Power Generation (OPG). The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

In addition to executing hundreds of millions in project financing over the past several years, Ontario Power Generation (OPG) completed its first bond offering in the Canadian public market with \$500 million unsecured 10-year bonds in October 2017.

Ontario Power Generation (OPG) has developed solid investor relationships and has a large investor base in the structured finance space that comprises the target market for financing Ontario's Fair Hydro Plan (OFHP) initiative. For example, the Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors, including major investors in the Canadian power and utility bonds markets.

OPG has a strong track record of producing high-quality financial reports on a timely basis. In addition, OPG will report on the activities of the Fair Hydro Trust in its quarterly financial reporting. The Fair Hydro Trust will be reported as a separate segment in these public documents

In terms of administration, OPG is currently managing its own corporate public debt program, three project financing programs totaling more than \$2 billion and two commercial paper programs.

Finally, Ontario Power Generation's (OPG) Treasury functions are well positioned given their management of existing multiple debt programs.

As the implementation of the financing program progresses, focus has remained on minimizing costs to ratepayers. Particular attention has been given to achieving a strong credit rating for the Trust, with the objective of mitigating the impact to ratepayers through effective market pricing of the funds being borrowed by the Trust.

Ontario Fair Hydro Plan (OFHP) is delivering much-needed rate relief to electricity consumers. The policy decisions we have made in implementing Global Adjustment (GA) refinancing, in consultation with third-party experts, senior officials and staff from across government, most effectively achieve the policy goals of the refinancing program and ensure that the cost of important investments in the electricity system are allocated fairly amongst electricity consumers in proportion to the benefit from received from them.

- 1. To Independent Electricity System Operator (IESO), how did IESO come to the conclusion that it was acceptable to use US Generally Accepted Accounting Principles (GAAP) instead of Public Sector Accounting Standards (PSAS) for rate regulated activities?**

And, is there a clause or section of PSAS that permits the use of GAAP in a given scenario?

Response

Independent Electricity System Operator's Approach to Accounting

The Independent Electricity System Operator (IESO) follows Public Sector Accounting Standards (PSAS) for its accounting.

The PSAS neither explicitly permits, nor prohibits, the recognition, measurement, presentation or disclosure of rate-regulated activities. In absence of a clear position on an issue, standard accounting practice dictates that an entity is entitled to consult another accounting standard. If I may cite from the PSAS Handbook, Section 1150.18 and 19:

"Paragraphs PS 1150.19-24 identify some of the other sources that a public sector reporting entity might consult to assist in selecting

accounting policies and disclosures that comply with paragraph PS 1150.05. Pronouncements issued by other bodies authorized to issue accounting standards may be useful sources to consult.

For example, accounting pronouncements published with the authority of the Canadian Accounting Standards Board (AcSB), International Accounting Standards Board (IASB), US Federal Accounting Standards Advisory Board (FASAB), US Governmental Accounting Standards Board (GASB), or International Public Sector Accounting Standards Board (IPSASB) are often important sources to consult on matters not covered by primary sources of GAAP or for assistance in applying a primary source of GAAP to specific circumstances.”

In this case, IESO consulted US GAAP, the only accounting framework in North America that provides guidance on rate regulated operations. The IESO has since adopted aspects of the US GAAP accounting framework allowing IESO to recognize a regulatory asset.

This decision was supported by an accounting opinion from our external auditors at KPMG and aligns IESO with six of the eight other independent system operators in North America.

It's a decision IESO made after careful consideration and extensive consultation with external experts. In fact, more than one of the big-four accounting firms agree with our decision on this matter. The IESO regularly reviews its accounting policies to ensure our financial reporting best represents our operations and the substance of the accounts we oversee.

Prompted by conversation with government about Ontario's Fair Hydro Plan (OFHP) and recognizing the need to consider impacts of future government policy, IESO revisited its options for reporting market accounts and recognizing regulatory assets.

Working with its audit partner KPMG, IESO determined that there were reporting options for market accounts and regulatory assets and that a choice was required as to whether or not to report these in IESO financial statements.

By analyzing the nature of the accounts, IESO's economic relationship to them, legislative requirements and market rules it was concluded that an appropriate position for either treatment was acceptable.

Organizations in Other Jurisdictions

When we started looking into changes to our accounting policies, we wanted to look at other organizations that have similar mandates to us.

Including IESO, there are 9 independent system operators in North America; seven in the U.S. and two in Canada: The IESO and Alberta's AESO.

We had discussions with these organizations about their operations and accounting practices.

We looked at their location, the accounting framework they follow, the type of organization they are (either not-for-profit or otherwise), whether they are subject to income tax, their capital structure, how they are governed, by which body they are regulated, and finally, whether they recognized balances of market participants and regulatory assets in their financial reporting.

From this research, we found that 7 of the other 8 ISOs recognize the balances of the market participants. They are:

1. **ISO New England;**
2. **NYISO**, in New York;
3. **MISO**, Midcontinent ISO which covers Midwest United States, Manitoba, and much of Arkansas, Mississippi and Louisiana;
4. **PJM**, covering the eastern U.S. states: Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia;
5. **CAISO**, in California;
6. **ERCOT**, in Texas; and
7. **Southwest Power Pool**, in central US.

When we talked to our counterparts across North America about regulatory assets, we found out that 6 of the other 8 entities recognize the economic effects of rate regulation, they are:

1. **AESO**, in Alberta;
2. ISO New England;
3. NYISO;
4. MISO;
5. PJM; and
6. ERCOT.

I should mention that the two ISOs that do not recognize the effect of rate regulation are California ISO (CAISO) and Southwest Power Pool (SPP).

When we talked to CAISO, we found out that their accounting framework actually allows for the recognition of regulatory assets and liabilities, but that it had concluded the need to recognize regulatory assets was no longer necessary.

When we talked to Southwest Power Pool, we learned that they simply do not have any variance accounts that would qualify as regulatory assets or liabilities.

So, when we looked at making the accounting change we considered that:

1. Including **market accounts** on our financial statements would provide increased transparency into the value of transactions that flow through Ontario's \$17 billion electricity market;
2. That **regulatory accounting** better reflected the economic substance of certain types of IESO expenses (like Smart Metering Entity expenses) which are recovered through a rate regulated by the OEB;
3. That the change would **enhance the relevance, transparency and accountability of our financial reporting**;
4. That this change would **bring IESO in line with its peers** across North America; and
5. Finally, that this accounting change would in **no way affect IESO's costs, or have any financial impact on electricity ratepayers** – all these factors confirmed our decision to make the accounting change.

Ultimately, IESO felt the public reporting of market accounts was relevant to the needs of its financial statement users and enabled greater transparency into the market transactions it oversees, which amounted to \$17 billion last year.

We also felt that recognizing regulatory assets would provide more transparency into the substance of the variance accounts we oversee.

As we just covered, this change to recognize regulated assets and market accounts brings IESO in line with accounting practices followed by other independent system operators in North America.

I should also mention, that in the past, the Ontario Power Authority, a predecessor organization of IESO, reported a subset of the market accounts on its financial statements – so this isn't new.

Role of an Independent Audit Firm

To confirm our view that the change was appropriate, IESO engaged independent audit firm KPMG for accounting research on the matter.

KPMG conducted its own research into the issue. KPMG subsequently issued a white paper on the accounting change, supporting IESO's decision to change its accounting policy. The changes were also reviewed with and supported by the Office of the Provincial Controller.

The accounting change was reviewed by IESO's Board of Directors, and approved.

As part of our regular 2016 year-end audit, KPMG issued an accounting opinion on our financial reporting. The accounting firm issued an unqualified or "clean" accounting opinion, meaning they supported the decision.

Finally, when publishing our 2016 financial statements, in order to communicate the change of accounting policy, IESO added additional notes in its 2016 financial statements to explain the changes in the Summary of Significant Accounting Policies section of its 2016 annual report.

These changes in no way affect IESO's costs, or have any financial impact on electricity ratepayers.

Ultimately, IESO made these changes because it will provide the users of its financial statements greater transparency into the market transactions it oversees, which amounted to \$17 billion last year, and better reflects the economic substance of IESO expenses that are recovered through rate-regulation.

It is KPMG's responsibility to express an opinion on the financial statements based on their audit.

In our case, KPMG conducted their audit in accordance with Canadian generally accepted accounting standards.

Those accounting standards require that the auditors comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the entity's financial statements are free from material misstatement.

Here are some of the things an audit looks into:

- An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements.
- The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.
- In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial

statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.

In addition, an audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

In IESO's 2016 financial statements, KPMG stated: "We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion".

This was followed by a statement of their unqualified opinion:

- In our opinion, the financial statements present fairly, in all material respects, the financial position of IESO as at December 31, 2016, and its results of operations and the changes in its new debt and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

This is taken directly from our 2016 financial statements, which are publically available.

So the "unqualified opinion" is basically accounting-speak to say that the audit partner undertook the thorough audit process, applied the appropriate standards and believes the financial statements follow the appropriate accounting standard and fairly and accurately represent IESO's financial position at year-end.

KPMG also found that US GAAP was an appropriate accounting framework to look to for guidance on rate-regulated operations, since PSAS was silent on the issue. And that regulatory assets under ASC 980 is not an exemption from the application of US GAAP.

Finally, KPMG's research also found that the accounting change would bring IESO in line with the majority of its ISO peers across North America.

When we considered the results of our own and KPMG's research, along with the fact that the change would have no impact on IESO's costs, or have any financial impact on electricity ratepayers, we went ahead and made the accounting change.

2. To Ontario Power Generation (OPG), can you explain what sort of external expertise OPG enlisted?

And, can you explain what counsel these experts provided with respect to the structure that has been set up and the accounting that will be used?

Response

Ontario Power Generation's Qualifications

Let me make a few remarks about Ontario Power Generation's (OPG) qualifications as the financing manager of Ontario's Fair Hydro Plan.

OPG currently manages a \$20 billion nuclear fund and \$15 billion in pension funds and as an entity regulated by the Ontario Energy Board (OEB), OPG also has extensive experience with regulatory deferral and variance accounts.

In addition, OPG has the breadth and demonstrated track record in the financial markets including the highly successful inaugural public debt offering earlier in October, private placement of insurance linked bonds, participation in securitization programs, and the very successful project debt issuances tied to new hydroelectric developments.

These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these financing structures have resulted in international recognition.

OPG has also developed solid investor relationships and has a large investor base in the structured finance space who would be the target market for financing Ontario's Fair Hydro Plan initiative.

For example, the Lower Mattagami project financing attracted a broad investor base of about 80 institutional investors, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt and three project financing programs totaling more than \$2 billion, as well as two commercial paper programs.

Role of Ontario Power Generation as the Finance Service Manager

OPG is acting as the Finance Service Manager (FSM) as prescribed under the Ontario Fair Hydro legislation, assigned to develop the financing plans and manage the Fair Hydro Trust, which manages the debt obligations associated with Global Adjustment (GA) refinancing.

In December we set up the Fair Hydro Trust, which is ring fenced from the generation activities of OPG in an effort to reflect the unique nature of this business and not co-mingle the operational activities of the two businesses.

The financing requirements are determined by the legislation and the reduction in consumers' bills, and are funded through the Trust.

OPG is responsible for arranging for third party debt to finance the purchase of the regulatory asset from IESO. This funding will be supplemented by both the Province and OPG.

- The first tranche of public debt was issued in early February 2018.
- The Trust will continue to borrow funds through the debt markets 3-4 times each year to purchase assets from Independent Electricity System Operator (IESO).

OPG is uniquely positioned to be the financing manager of Ontario's Fair Hydro Plan as we understand the supply and demand characteristics of the market. As previously mentioned, we regularly interact with the Ontario Energy Board (OEB) and the IESO, and we have experience in Treasury operations in the marketplace including relationships with credit rating agencies.

There are three specific areas that we supplemented our team with external resources.

- First, was legal advice to ensure there is clear alignment between the legislation and the Trust and its related requirements and obligations.
- The second was financing advice directed at the capital markets again to ensure alignment with the markets focused on achieving the most cost effective financing to ensure the rate payer impact is minimized.
- The third was accounting advice directed at the set up and governance of the Trust and then to achieve the transparency in reporting that is critical.

Greater Transparency

As has been mentioned OPG has strong capabilities across these areas, but felt it was prudent to ensure that all steps are taken to establish the Trust and its activities in a clear and transparent manner.

The structure that has been set up in fact ensures a high level of transparency.

As these deferred amounts are funded through third party financing, the process by design in financial market space requires disclosure and oversight including credit rating agencies, the OEB, external audit of the Trust itself, additional OPG disclosure in its reports, oversight from lenders through Trust indenture documents.

Ratepayers and taxpayers will be able to clearly see the financial results of the Trust as it relates to the legislation.

Due to OPG's ownership and control over the key activities of the OPG's Fair Hydro Trust, OPG will consolidate the financial results of the Trust in accordance with US GAAP.

OPG will report the financial results of the Trust's operations as part of its regular quarterly and annual reporting process, beginning in March 2018.

The Trust's activities will be clearly reported as a separate segment in OPG's overall results.

OPG's financial reports are audited (currently by ERNST & Young) and filed with the Ontario Securities Commission (OSC) and subject to OSC oversight and a public news release is always issued when the reports are filed.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 3, Public Accounts of the Province

Key Messages, Q&A Response and Issues

March 2018

KEY MESSAGES

- We remain committed to working with the Office of the Auditor General and respectfully reviewing the independent views it provides to the Legislative Assembly.
- We are confident in the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO), both of whom play vital roles in ensuring an efficient, fair and reliable electricity market for ratepayers across the province.
- According to IESO, both programs that are the subject of the Auditor General's analysis are required for system reliability and ensure we continue to meet North American reliability standards.
- If these programs were eliminated, reliability would be put at risk.
- With respect to the Industrial Conservation Initiative (ICI), the program benefits electricity consumers by reducing demand at peak periods, helping to reduce the need to build more peaking electricity generation in the long-term.

Industrial Conservation Initiative (ICI):

- Our electricity system is planned to ensure we have enough generation to meet peak demand.
- By keeping peak system demand as low as it can be, we can avoid building costly new generation.
- This makes the system more cost-effective for all ratepayers.
- Our system operator estimates that this program reduced peak demand by about 1,300 megawatts in 2016 – the peak electricity demand of a city roughly the size of Mississauga.
- The Ministry of Energy continues to monitor and report on the impact of the ICI program on the electricity system, including reductions in peak demand and impacts on all classes of electricity consumers.
- The results of the ICI program can be seen in monthly Independent Electricity System Operator (IESO) reports and the quarterly Ontario Energy Report.

Roles and Legislative Powers of OEB, MSP and MACD:

- We are confident in the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO), both of whom play vital roles in ensuring an efficient, fair and reliable electricity market for ratepayers across the province.

- We welcome and appreciate the recommendations of the Auditor General and agree with the need for effective and strong electricity market oversight in Ontario.
- We are working closely with IESO and OEB to ensure effective market oversight mechanisms, including reviewing the investigatory powers of IESO's Market Assessment and Compliance Division (MACD), and the role and authority of OEB in the market rule amendment process, particularly in instances of potential abuse of the market rules.
- This year, Ontario is undertaking a review of OEB to build on its mandate and prepare for the future of the electricity sector. Market oversight is an important factor as modernization of OEB progresses.
- The Ministry plans to meet with the OEB modernization panel to discuss these issues later this month.

Real-Time Generation Cost Guarantee (RT-GCG) and Congestion Management Settlement Credit (CMSC) Programs:

Instances of Generators Claiming Ineligible Costs

- Our system operator continues to take strong action when market participants contravene the market rules – it investigates and imposes fines, recovers ineligible claims and returns these funds to Ontario ratepayers.
- All actions taken put the ratepayer first by aiming to maintain reliability and reduce costs. This includes striving to recoup the maximum amount of costs, while minimizing legal fees.
- Both programs are required to keep the grid stable. If these programs were removed, reliability would be put at risk.

Next Steps for the Electricity Market

- Our system operator is working to transform our electricity market.
- The Market Renewal initiative is expected to result in a more competitive marketplace that meets our system's needs while increasing flexibility and efficiencies.
- It is projected that Market Renewal will save up to \$5.2 billion over 10 years.
- Market Renewal will replace the Real-Time Generation Cost Guarantee (RT-GCG) program and Congestion Management Settlement Credits (CMSC) with more efficient and transparent mechanisms.

Interim Steps until IESO's Market Renewal Takes Hold

- Until this transformation is complete, our system operator remains committed to ensuring the current electricity market continues to be improved and operates fairly and efficiently for ratepayers across the province.
- Due to ongoing changes and improvements, programs are more efficient today – with the total cost of the Real-Time Generation Cost Guarantee program dropping from \$61 million in 2014 to \$23 million in 2016 and \$22 million in 2017– a more than approximately 60 per cent cut in program costs over the course of two years.
- In addition, our system operator will continue to prioritize reliability, and optimize programs within the existing electricity system framework.
- Working with the Ontario Energy Board (OEB) and our system operator, we are undertaking a review of the Electricity Act (1998) – focusing on how market rules are approved.
- We will also review the Ontario Energy Board's authority regarding the enforcement of electricity market rules and the response to abuses of these rules.
- To ensure that our system operator can effectively conduct its investigations, we are working together regarding the potential need for additional legislative powers to assist our system operator in performing its critical responsibilities.

Cybersecurity:

- Our system operator complies with all applicable North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection standards, which include standards for cybersecurity.
- A recent audit from The North American Electric Reliability Corporation found that the IESO is fully compliant with continent-wide operating standards, including recently introduced cyber asset protection rules that represent significant progress in mitigating cyber risks to the bulk power system. The electricity sector is unique as the only critical infrastructure sector with mandatory and enforceable cybersecurity standards.
- Our system operator takes this very seriously, and is already in the process of recruiting a new Chief Information Officer (CIO) with an increased focus on cybersecurity.
- Our system operator will also consider creating a senior-level position for cybersecurity with formal reporting to both the system operator's executive leadership and Board of Directors.
- Our system operator is working to implement an independent consultant's recommendation to increase the number of current cybersecurity staff in a manner in line with the Auditor General's recommendation.

Q&AS RESPONSE

Industrial Conservation Initiative (ICI)

Q. What changes were made to the Industrial Conservation Initiative (ICI) as part of Ontario's Fair Hydro Plan?

Industrial Conservation Initiative (ICI) is a demand response program and cost allocation mechanism that was introduced in 2011 following consultation with our stakeholders.

ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours. This benefits companies financially, but it also benefits the electricity system by reducing the need for peaking generation, which reduces system costs that would otherwise need to be recovered from all Ontario ratepayers. It's a voluntary program and eligible consumers are able to opt in or out in June of each year.

As part of Ontario's Fair Hydro Plan (OFHP), ICI has been expanded to include smaller manufacturers and greenhouses with peak demand between 500 kW and 1 MW, in addition to the consumers over 1 MW who were already eligible.

- The smaller manufacturing and greenhouse consumers include those with North American Industry Classification System (NAICS) codes starting with 31-33 and 1114.
- Newly eligible participants would have begun to see the impact on their July 2017 bills.

This was in addition to an earlier regulatory amendment, effective January 2017, which had expanded the ICI to all consumers over 1 MW of average monthly peak demand.

Prior to these two expansions, there were approximately 300 ICI participants. For the current adjustment period there are approximately 1,100 participants, many of which would not have previously been eligible but realized they could benefit their companies or organizations by opting in to the program as a result of the expansions.

Q. The AG Report states that the ICI program is “shifting a significant amount of the global adjustment charge from large industrial ratepayers to residential and small-business ratepayers”. Is it fair that these classes of ratepayers are subsidizing electricity costs of big businesses?

The Industrial Conservation Initiative (ICI) is about fairness for electricity consumers – large and small.

Consumers who are drawing electricity from the system at times of peak demand in the province pay a larger proportion of the costs.

Similarly, consumers who are contributing the least to peak electricity demand pay a smaller portion of these related costs.

This program reduces the need for additional investments in expensive electricity generation infrastructure – benefiting all ratepayers.

Our system operator estimates that this program reduced peak demand by about 1,300 megawatts in 2016 – the peak electricity demand of a city roughly the size of Mississauga. This program helped us reduce peak demand in the province. Reduced peak demand has allowed us to suspend procurements such as LRP II, saving ratepayers \$3.8 billion in costs for the electricity system.

The Ministry of Energy continues to monitor and report on the impact of the ICI program on the electricity system, including reductions in peak demand and impacts on all classes of electricity consumers.

The results of the ICI program can be seen in monthly Independent Electricity System Operator (IESO) reports and the quarterly Ontario Energy Report.

If pressed, additional details on the peak reduction:

- The peak demand reduction associated with ICI is equivalent to:
 - o The peak demand of a city roughly the size of Mississauga¹;
 - o Nearly 6 per cent of province-wide peak demand²;
 - o Two gas plants the size of Halton Hills Generating Station west of the Greater Toronto Area³; or
 - o Nearly three times the amount of demand response that cleared the market in the most recent auction held by the Independent Electricity System Operator (IESO) in December 2016⁴.

Q. Will you review the impact of the ICI on low-volume consumers and report it, as recommended by the OAG?

Ontario's Fair Hydro Plan's significant savings for residential consumers and as many as half a million small businesses and farms will not be impacted by this program's expansion.

Ontario's Fair Hydro Plan reduced electricity bills for residential consumers by an average of 25 per cent and will hold any increases to the rate of inflation for four years.

Information related to Global Adjustment (GA) and the allocation of costs and consumption for each class of electricity consumer is published by the Independent Electricity System Operator (IESO) on a monthly basis.

¹ According to the IESO and data from the OEB's 2016 Yearbook, peak demand for Mississauga in the summer of 2016 was 1,455 MW. <http://www.ieso.ca/power-data/demand-overview/historical-demand>

² According to the IESO, peak demand in Ontario was 23,213 MW in 2016 – therefore 1,300 MW represents about 6%.

³ Halton Hills Generating Station provides 683 MW of capacity – therefore 1,300 MW is approximately twice this amount. <https://www.transcanada.com/globalassets/pdfs/power/halton-hills/transcanada-hh-fact-sheet.pdf>

⁴ The 2016 DR Auction totaled 455 MW for the summer commitment period – therefore 1,300 MW is approximately three times this amount. <http://www.ieso.ca/corporate-ieso/media/news-releases/2016/12/ieso-announces-results-of-demand-response-auction>

- Specifically, the information published includes total GA, GA allocated to Class A and Class B, and demand allocated to Class A and Class B⁵.

The Ministry of Energy continues to monitor and report on the impact of the ICI program on the electricity system, including reductions in peak demand and impacts on all classes of electricity consumers.

The results of the ICI program can be seen in monthly Independent Electricity System Operator (IESO) reports and the quarterly Ontario Energy Report.

Q. What is the history of ICI and what benefits does it provide to the electricity system?

The Industrial Conservation Initiative (ICI) is an electricity demand response program and cost allocation mechanism that was implemented in 2011 following consultation with industry partners and the public.

Consumers who are drawing electricity from the system at times of peak demand in the province pay a larger proportion of the costs.

Similarly, consumers who are contributing the least to peak electricity demand pay a smaller portion of these costs.

It's a voluntary program and eligible consumers are able to opt in or out in June of each year.

Initially, this program was available to consumers with peak demand above five megawatts. Since 2011, the program has been expanded three times:

- Effective July 2015, extended to consumers operating in select electricity-intensive sectors with average monthly peak demand greater than 3 megawatts.
- Effective July 2017, extended to all consumers with average monthly peak demand greater than 1 megawatt.
- Effective July 2017, extended to manufacturers and greenhouses with average monthly peak demand greater than 500 kilowatts.

In addition to the cost savings for participating businesses and organizations – a 1/3 cut in their electricity costs on average – the program provides a number of system benefits.

First, the ICI benefits electricity consumers by reducing demand at peak levels, helping to delay the need for more electricity generation in the long-term.

Second, it better aligns consumer costs with their contribution to those costs. Under the program, consumers who are drawing electricity from the system at times of peak demand in the province pay a larger proportion of the costs. This is fair because they are contributing to the incurrence of electricity system costs associated with higher peak demand.

⁶ <http://www.ieso.ca/en/sector-participants/settlements/global-adjustment-components-and-costs>

Lastly, ICI allows participants to reduce electricity costs by one third on average, helping to keep our large electricity consumers in the province – these consumers continue to contribute towards fixed electricity system costs, such as the capital costs of new generation that would otherwise be the responsibility of remaining consumers.

We have partnered with the Ontario Chamber of Commerce (OCC) and Canadian Manufacturers and Exporters (CME) to ensure that all Ontario businesses are aware of the benefits of this program.

Q. How does the Ministry of Energy monitor the Industrial Conservation Initiative (ICI)?

The Ministry of Energy collects information and data on the Industrial Conservation Initiative (ICI) primarily from our system operator and Local Distribution Companies (LDCs).

Information related to Global Adjustment (GA) and the allocation of costs and consumption for each class of electricity consumer is published by the Independent Electricity System Operator (IESO) IESO on a monthly basis.

- Specifically, the information published includes total GA, GA allocated to Class A and Class B, and demand allocated to Class A and Class B⁶.

The Ministry also receives information from IESO and LDCs regarding the number of ICI participants.

Since ICI is a form of demand response (i.e., allows participating customers to manage their GA costs by reducing demand during peak periods), IESO also reports on the peak reduction associated with ICI. In 2016, ICI is estimated to have reduced peak demand by 1,300 MW⁷. This estimate is reported in number of publications, including IESO's ICI Backgrounder and the 18-Month Outlook.

The Ministry continues to monitor and report on the impact of the ICI program on the electricity system, including reductions in peak demand and impacts on all classes of electricity consumers.

The results of the ICI program can be seen in monthly Independent Electricity System Operator (IESO) reports and the quarterly Ontario Energy Report.

Q. Do you think the cost shift to non-ICI participants is in reasonable? What is actual cost shift?

Industrial Conservation Initiative (ICI) is about fairness for electricity consumers – large and small. Through the program, the consumers who contribute the least to peak demand pay a smaller portion of costs associated with electricity generation, conservation and demand management programs.

In addition, because ICI provides a reduction in Ontario peak demand, it helps defer the need to build expensive new peaking generation facilities in the longer term and reduces costs for all ratepayers across the province: residential, commercial and industrial.

⁶ <http://www.ieso.ca/en/sector-participants/settlements/global-adjustment-components-and-costs>

⁷ <http://www.ieso.ca/-/media/files/ieso/document-library/global-adjustment/ici-backgrounder.pdf?la=en>

By keeping peak system demand low, we are making the system more cost-effective for all ratepayers into the future. Simply put, ICI is fair because it is designed to match each customer's share of costs with their contribution to those costs.

If pressed on the amount of the cost shift:

For the 2017 calendar year, Global Adjustment (GA) charges paid by Class A electricity consumers were about \$1.2 billion lower than they would have been if the program was not in place (i.e., GA was charged volumetrically for all consumers).

In the report, the AG noted the Market Surveillance Panel's (MSP) estimate that GA for Class A was reduced by almost \$245 million in the first 10 months of the program (i.e., in 2011). The AG also notes that, given the expansions of the program that this amount has increased.

Roles and Legislative Powers of OEB, IESO, MSP and MACD

Q. What are the powers of the Ontario Energy Board (OEB) and the Independent Electricity Operator (IESO) in the market rule review and amendment process under the Electricity Act, 1998?

Under the Electricity Act, 1998, the Ontario Energy Board (OEB) has certain oversight powers with respect to the introduction of new market rules and the review and amendment of existing rules, including the power to revoke an amendment and refer it back to the Independent Electricity System Operator (IESO) for further consideration.

The OEB may also review and order an amendment to the market rules where the Market Surveillance Panel (MSP) reports on instances of market power abuse.

Under the Electricity Act, 1998, IESO has the authority to make and amend the rules, including rules that govern the making and publication of the rules themselves.

We welcome the AG's recommendations regarding the authority of the OEB in the market rule review and amendment process under the legislation. The need for legislative change to clarify the authority of OEB regarding the market rules is under review.

Q. Why didn't the Ministry respond to the recommendations of the Market Surveillance Panel (MSP)?

We are confident in the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO), both of whom play vital roles in ensuring an efficient, fair and reliable electricity market for ratepayers across the province.

The Ministry of Energy is committed to effective and strong electricity market oversight in Ontario.

The Ministry is briefed on all Market Surveillance (MSP) reports, including monitoring and investigations. The Ministry discusses the recommendations and status of actions taken to address them with IESO.

IESO has made numerous revisions to the market rules in response to MSP recommendations, and continues to work to analyze and assess the recommendations and consider possible amendments to market rules, while balancing the need to ensure electricity system reliability and consider any unintended adverse effects.

The Ministry is continuing to work closely with IESO and the Ontario Energy Board (OEB) to ensure effective and strong market oversight mechanisms, including reviewing the market rule amendment process and ensuring that any issues raised by MSP are effectively addressed in a timely fashion.

Q. Do you have the authority to direct IESO to investigate a market participant?

In accordance with the requirement for independence in the investigation process, the Ministry of Energy does not have the specific authority to direct investigations undertaken by the Independent Electricity System Operator (IESO) or Market Assessment and Compliance Division (MACD). Note: Per email from IESO on December 6, 2017 regarding its enforcement authorities.

Market oversight in Ontario is undertaken by three independent bodies:

- Ontario Energy Board (OEB);
- OEB's Market Surveillance Panel (MSP); and
- IESO's Market Assessment and Compliance Division (MACD).

Each plays a vital role in ensuring an efficient, fair and reliable electricity market for ratepayers across the province:

- OEB is the independent regulator for the energy sector with a mandate to protect the interests of consumers and provide advice to the government. The Minister of Energy has the general authority to direct OEB to review the market rules or market participant licenses in order to address possible abuse of market power.
- OEB's MSP monitors, investigates and reports on activities and behaviour in IESO-administered markets, including how well the market is functioning.
- MACD, an independent branch within IESO, works to foster compliance with the market rules, monitors the markets for anomalous or inappropriate behaviour by market participants, is authorized under the market rules to request further information from market participants and imposes sanctions (i.e., financial penalties) for failure to comply with the market rules. MACD staff also support MSP in its analysis and investigations.

We are confident in the ability of OEB, MSP and MACD to ensure a fair, efficient and reliable electricity market and remain committed to working collaboratively to ensure effective and strong electricity market oversight in Ontario.

The Ministry is continuing to work closely with IESO and the Ontario Energy Board (OEB) to ensure effective and strong market oversight mechanisms, including reviewing the market rule

amendment process and ensuring that any issues raised by MSP are effectively addressed in a timely fashion.

Q. Based on the AG's recommendations is the Ministry of Energy planning to provide OEB or MACD with additional powers?

We welcome and appreciate the recommendations of the Auditor General and agree with the need for effective and strong electricity market oversight in Ontario.

To that end, we are working closely with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB) to ensure effective market oversight mechanisms, including:

- Reviewing the investigatory powers of IESO's Market Assessment and Compliance Division (MACD), including the potential need for additional legislative authority for MACD to compel evidence; and
- Reviewing the authority of OEB to initiate review of a market rule and considering the need for additional legislative authority to ensure any abuse of the market rules is adequately addressed.

To ensure effective and strong electricity market oversight in Ontario, the potential need for additional legislative authorities for the OEB and MACD is under review as highlighted in our written correspondence to the Standing Committee on Public Account on February 21, 2018.

This year, Ontario is undertaking a review of OEB to build on its mandate and prepare for the future of the electricity sector. Market oversight is an important factor as modernization of OEB progresses.

The Ministry plans to meet with the OEB modernization panel to discuss these issues later this month.

Q. Did IESO investigate whether Ontario Power Generation (OPG) acted an inappropriate manner with respect to the electricity market? What was the penalty assessed to OPG for its conduct?

Late last year, Ontario Power Generation (OPG) acknowledged that it was one of the companies that had been investigated by the Independent Electricity System Operator (IESO).

IESO advises that OPG has settled the matter. Note: The terms of the settlement are confidential.

NOTE – THESE ARE Q&AS RELATE TO IESO ISSUES. THESE WERE PREPARED IN ADVANCE OF THE RELEASE OF THE AG's 2017 ANNUAL REPORT. THESE HAVE BEEN UPDATED AS NECESSARY.

Real-Time Generation Cost Guarantee (RT-GCG)

Legend:

- IESO's Real-Time Generation Cost Guarantee Program (RT-GCG) = Standby Cost Recovery Program (AG)
- IESO's Congestion Management Settlement Credits (CMSC) = Lost Profit Recovery Program (AG)

Q. There are a lot of different numbers floating around in this report. Can you clarify what the total cost is of the Real-Time Generation Cost Guarantee Program? What is the total cost of the Congestion Management Settlement Credits?

Note: The OAG's report states that about **\$1.6 billion** of Congestion Management Settlement Credits (CMSC) have been paid since 2002.

Payments made through these credits ensure reliability for our electricity system.

They incent generators to follow Independent Electricity System Operator (IESO) instructions that would otherwise result in a financial loss. Without CMSC, suppliers could refuse to follow dispatch instructions and impact reliability:

- These costs result from the natural physical limits of the power system, such as transmission line limits, which can prevent power from getting to where it needs to go;
- These are costs, about \$1.6 billion since 2002, that are inherent in any electricity system and cannot be eliminated without overbuilding Ontario's transmission system; and
- These credits are needed to maintain the reliability of Ontario's electricity system.

Note: The OAG's report claims that as much as **\$260 million** in ineligible costs were paid under the Real-Time Generation Cost Guarantee (RT-GCG) program between 2006 and 2015.

Two thirds (**\$168 million**) of ineligible costs from this program have been returned to ratepayers.

The system operator's auditors make sure that the costs returned to ratepayers outweigh any kind of legal risk that might exist by taking matters to the courts.

The system operator has an active compliance division and a new CEO that is going to ensure they have the resources they need.

Note: The OAG's report also claims that **\$30 million** in additional costs is spent per year on the RT-GCG program despite the MSP recommending IESO scale back the program.

According to IESO, the Panel's recommendations, which would significantly reduce the incentive structure under the program, would have negative impacts on the reliability of our electricity system and put our obligation to meet North American reliability standards at risk – not only jeopardizing the reliability of Ontario's grid, but those of our neighbours as well.

The electricity from some gas-fired units might not be offered into the market in real time, which would, in turn, impact the reliability of our electricity system, potentially impairing the system operator's ability to address changing conditions through the day.

As a result of this change and other improvements, this program is more efficient today – with the total cost dropping from \$61 million in 2014 to \$23 million in 2016 and \$22 million in 2017 – a more than 60 per cent cut in program costs over the course of two years.

Q. Why is IESO not able to recoup 100 per cent of the ineligible costs that have paid to private power generators? Doesn't this just encourage further 'gaming' within the electricity system?

To ensure ratepayers are protected and cost recovery is maximized, our system operator negotiated settlements with generators where it made sense – avoiding costly litigation.

Priority is placed on ratepayer protection, and ensuring that recouped costs go back to Ontario's electricity consumers.

Q. What is the total amount of ineligible costs that private power generators have received from the Independent Electricity System Operation (IESO) since the electricity market opened in 2002? At what point does IESO give up on recouping the full cost lost to ratepayers?

There are strong measures in place under Ontario's electricity market rules that allow the system operator to identify and take action on false claims under this program (i.e., Real-Time Generation Cost Guarantee (RT-GCG)).

Our system operator has the authority to conduct audits of claims made by generators and other market participants.

And, if needed, our system operator can impose fines and seek the recovery of amounts that were incorrectly claimed.

In the case of Goreway – a \$10 million fine was imposed and a substantial portion of payments were recovered from the generator's total RT-GCG claims.

Our system operator is now working on additional resources to strengthen their oversight division.

Q. Why has the Independent Electricity System Operator (IESO) repeatedly failed to make changes or cancel both the Real-Time Generation Guarantee Program (RT-GCG) and Congestion Management Settlement Credits (CMSC) as recommended by the Ontario Energy Board's Market Surveillance Panel (MSP)?

According to the Board's Market Surveillance Panel (MSP), many of the issues associated with CMSC credits have been brought to an end, as a result of the Panel having identified them, and our system operator acting to improve the program's effectiveness and transparency.

Our system operator has made a number of changes since market opening that have improved program effectiveness and transparency.

According to IESO, both programs are required to ensure Ontario families and businesses have an electricity system they can count on every second of every day and that we continue to meet North American reliability standards.

Our system operator has the power to conduct audits of claims made by generators and other market participants.

And, if needed, our system operator can impose fines and seek the recovery of amounts that were incorrectly claimed.

Our system operator has made more than a dozen market rule changes since 2002 to make CMSC payments more efficient and transparent.

Q. The OAG reports that in almost all of the OEB Panel's reports – 28 since 2002 – that the Panel has recommended changes to the Real-Time Generation Cost Guarantee (RT-GCG) program. Why do these programs continue to exist after alarm bells have been going off for years from your own Panel?

This program guarantees the recovery of certain costs incurred whenever an eligible electricity generation facility starts up and is brought up to the minimum level of electricity output that it can reliably supply into our grid.

At times, our system operator has had concerns that the Panel's recommendations would significantly reduce the incentive structure under this program, leading to negative impacts on the reliability of Ontario's electricity system.

Our system operator has taken a number of actions to improve the RT-GCG program, resulting in a significant reduction in the annual cost of the program compared to 2014.

Q. As the province's independent agency responsible for protecting ratepayers, why has the OEB not forced IESO to make changes or cancel these programs?

Our system operator and the Ontario Energy Board's Market Surveillance Panel (MSP) have a shared responsibility to monitor behaviour in the province's electricity market.

According to the MSP, many of the issues associated with these credits have been brought to an end, as a result of the MSP having identified them, and our system operator acting to improve the program's effectiveness and transparency.

We are confident in our system operator's ability to administer an efficient and fair electricity market, as well as the MSP's ability to provide independent monitoring and investigations. Working with the Ontario Energy Board (OEB) and our system operator, we are undertaking a review of the Electricity Act (1998) – focusing on how market rules are approved.

We are also undertaking a review of the OEB's authority regarding the enforcement of electricity market rules and the response to abuses of these rules.

To ensure that our system operator can effectively conduct its investigations, we are working together regarding the potential need for additional legislative power to assist our system operator in performing its critical responsibilities.

- Powers that could include compelling documentation from market participants related to their behaviour in the electricity market.

Q. Why did we start reimbursing generators for maintenance costs? Why has this continued despite the alarm bells? What benefit does this provide to the system when it clearly causes so many problems?

As part of the phase out of coal, our supply mix changed to include more gas-fired generation.

Because of this transition, our system operator launched improvements to the program (i.e., Real-Time Generation Cost Guarantee (RT-GCG)) to ensure continued reliability.

These improvements included:

- Guaranteeing certain start-up operating and maintenance costs;
- Tightening program eligibility criteria; and
- Putting in place restrictions on eligible fuel costs.

These were aimed at improving the overall efficiency of the program and ensuring we continued to have an electricity system that families and businesses could count on.

The Panel's recommendation to eliminate guarantees under this program (i.e., Real-Time Generation Cost Guarantee (RT-GCG) for operating and maintenance costs is based on earlier versions of this program where eligible payments were limited to fuel-only costs.

As our generation supply mix has become cleaner, the program has been adjusted accordingly.

Q. Can you name any other programs or jurisdictions that allow expenses to be reimbursed/paid before they're reviewed and approved? Why is this the way it works with these programs?

All but one of the nine system operators in North America also commit generators and compensate them for starting up.

Cost submissions by electricity generators through this program (i.e., Real-Time Generation Cost Guarantee (RT-GCG) and related payments happen in a timeframe very close to the ongoing financial settlement of the ~\$20 billion electricity market.

As a result, generator costs were only able to be audited after payment. This is similar to a Canada Revenue Agency income tax process whereby submissions are presumed to be correct until such time as audits and evaluations take place.

There are processes in place under our system operator's market rules to identify and manage false claims under this program. Our system operator has the power to conduct audits of claims made by generators and other market participants.

Q. These investigations have shown up a huge range of claimed but ineligible costs, including \$175,000 for parkas and coveralls, the costs of staff car washes, carpet cleaning, road repairs, landscaping, scuba gear and raccoon traps. Do you consider it appropriate that Ontario ratepayers are picking up the tab for these?

Those costs were clearly unacceptable and our system operator has taken appropriate steps to recover these payments.

The ineligible costs mentioned in the Auditor General's Report were identified by our system operator as part of the audit process that is in place.

Our system operator continues to take strong action when power producers claim ineligible costs – it investigates and imposes fines, recovers ineligible claims and returns these funds to Ontario ratepayers.

In the case of Goreway – a \$10 million fine was imposed and a substantial portion of payments were recovered from the generator's total Real-Time Generation Cost Guarantee (RT-GCG) claims.

Q. With this outrageous amount of ineligible costs being paid out of the pockets of Ontario ratepayers, how can families and businesses be confident with IESO's oversight of the electricity market?

Our system operator continues to take strong action when power producers claim ineligible costs – it investigates and imposes fines, recovers ineligible claims and returns these funds to Ontario ratepayers.

In the case of Goreway – a \$10 million fine was imposed and a substantial portion of payments were recovered from the generator's total Real-Time Generation Cost Guarantee (RT-GCG) claims.

Our system operator has taken action to address issues raised by the Ontario Energy Board's Market Surveillance Panel.

Our system operator has taken a number of actions to improve the RT-GCG program and implemented market rule changes that address the issues and recommendations highlighted by the Panel.

Q. The AG's report mentions that the MSP has been "concerned" about payments of \$500 million paid to market participants in Northwestern Ontario. Can you explain these payments?

Congestion Management Settlement Credits (CMSC) are paid mainly to generators when they are instructed by our system operator to produce power that would result in them being hit with a financial loss.

These payments are generally the result of system constraints, such as transmission line limits, that lower the ability of power to flow in or out of a particular area of the province.

The Ontario Energy Board's Market Surveillance Panel recognized that the payments in the northwest were due to hydroelectric generation supply in this part of the province and the limited ability to transfer excess power out of the northwest due to congestion on transmission lines.

These programs have been constantly evolving with improvements to transparency and effectiveness through changes initiated by our system operator.

These payments are necessary to ensure our province's generators can comply with our system operator's instructions for when, where and how much electricity is needed to keep the lights on for families and businesses.

Our system operator is working to transform our electricity market.

The Market Renewal initiative is expected to result in a more competitive marketplace that meets our system's needs while increasing flexibility and efficiencies.

It is projected that Market Renewal will save up to \$5.2 billion over 10 years. Once launched, Market Renewal will replace the Real-Time Generation Cost Guarantee (RT-GCG) program and Congestion Management Settlement Credits (CMSC).

Q. With both the design of the Market Renewal Initiative and with previous changes to the Real-Time Generation Guarantee Program and Congestion Management Settlement Credits being overseen by the same market participants that have claimed ineligible expenses, aren't you just letting the fox guard the henhouse?

The resignations of the co-chairs of the Market Renewal Working Group were effective December 1, 2017.

As we head into the next phase, our system operator will also be adding an independent fairness commissioner to oversee the work of this group. The Market Renewal Working Group includes a diverse group of participants from consumers to generators.

It's important that our system operator hears from a wide array of perspectives to ensure the transformation of our electricity system is done right.

The Market Renewal Working Group includes participants that advocate for low-volume consumers, including Weir Foulds.

All Market Renewal sessions are fully transparent, and open to the public. Stakeholders in Ontario's electricity sector have the opportunity to participate in our system operator's stakeholder engagement process for Market Renewal.

Through this process, our system operator is working to transform the province's electricity market.

The Market Renewal initiative is expected to result in a more competitive marketplace that meets our system's needs while increasing flexibility and efficiencies.

This transformation is expected to save up to \$5.2 billion between 2021 and 2030 and forms a key component of the government's plan to bring down the cost of electricity for families and businesses

Our system operator will make the final decisions regarding the design of a transformed electricity system, with oversight provided by the independent Ontario Energy Board (OEB).

Q. The AG finds that IESO Oversight Division's investigative powers lack teeth and it can only receive information from *willing* market participants to support investigations. This means there is no way to uncover the extent of violations. Are you concerned with the Division's lack of powers to fulfill its role adequately?

We are confident in our system operator's ability to administer an efficient and fair electricity market, as well as the Panel's ability to provide independent monitoring and investigations.

Our system operator is actively working to strengthen the Market Assessment and Compliance Division (MACD).

We are considering the potential need for additional legislative powers to assist our system operator in performing its critical responsibilities, including its investigations.

- Powers that could include compelling documentation from market participants related to their behaviour in the electricity market.

Q. With Ontario's surplus of electricity supply, why is the Real-Time Generation Cost Guarantee Program even needed? Aren't you just paying generators to 'standby' for electricity that's won't be required?

According to IESO, this program makes sure that adequate electricity will be available to meet the expected electricity demand— an important factor in meeting North American reliability standards.

The Real-Time Generation Cost Guarantee (RT-GCG) program plays a key role in ensuring reliability by providing generators – our natural gas plants, our hydroelectric dams – with an incentive to offer flexible electricity supply.

This program guarantees the recovery of certain costs incurred whenever an eligible electricity generation facility starts up and is brought up to the minimum level of electricity output that it can reliably supply into our grid.

Q. The OAG finds that IESO hasn't been distributing resources in an effective way to ensure all investigations are being completed into improper costs being claimed. In fact, the OAG states that only one in five potential cases identified by the Director of the Oversight Division can be investigated, because of lack of resources.

What is the scale of this problem (i.e., how many investigations should have been done)? And what is IESO's plan to deal with it? Why does IESO's oversight team not have the proper IT system to do their investigations?

Working with the Ontario Energy Board (OEB) and our system operator, we are undertaking a review of the Electricity Act (1998) – focusing on how market rules are approved.

We are also undertaking a review of the Ontario Energy Board's authority regarding the enforcement of electricity market rules and the response to abuses of these rules.

We are considering the potential need for additional legislative powers to assist our system operator in performing its critical responsibilities, including its investigations.

- Powers that could include compelling documentation from market participants related to their behaviour in the electricity market.

Q. With so many stones left unturned, will IESO commit to undertaking a more fulsome audit of generators to ensure ineligible claims are recovered? If given more resources and authority, will the system operator take action on these uncompleted audits?

Ontario is in a robust supply situation as a result of investments made over the last decade, making now the right time to make more fundamental changes to the electricity market.

These changes are being made through IESO's Market Renewal Program, which will result in a more efficient, competitive, and transparent electricity market.

The Ontario Energy Board's Market Surveillance Panel is supportive and is participating in the initiative to help inform its efficient design and implementation.

The program will result in up to \$5.2 billion in savings over a 10-year period, the majority of which will be realized by Ontario ratepayers.

These benefits will come from better scheduling and dispatching of resources, and more efficient and competitive procurement of Ontario's electricity needs.

As part of these efforts, the RT-GCG program will end. Generators' start-up costs will still need to be compensated, but it will be more transparent, competitive and efficient as they will be included in the offers they submit into the market.

The IESO is currently working with a wide range of stakeholders on a high level design for the Market Renewal Program and will begin the detailed design and implementation phase in 2019.

Q. You talk about Market Renewal as though it will solve all the problems flagged by the Auditor, but isn't market renewal years away from taking effect?

These programs have been constantly evolving with improvements to transparency and effectiveness through changes initiated by our system operator.

Market Renewal is expected to save up to \$5.2 billion between 2021 and 2030, and forms a key component of the government's plan to bring down the cost of electricity for all consumers.

Our system operator is taking the time to work with experts and sector partners to maximize the efficiencies that can help bring down costs – this will be the most fundamental redesign of the electricity system since the market opened in 2002 and it cannot be rushed.

Once launched, our transformed electricity marketplace will significantly restrict gaming opportunities and reduce the need for payments and credits through these programs.

In the meantime, we are working with the Ontario Energy Board and our system operator, to undertake a review of the Electricity Act (1998) – focusing on how market rules are approved.

We are also undertaking a review of the Ontario Energy Board's authority regarding the enforcement of electricity market rules and the response to abuses of these rules.

We are considering the potential need for additional legislative powers to assist our system operator in performing its critical responsibilities, including its investigations.

- Powers that could include compelling documentation from market participants related to their behaviour in the electricity market.

Q. What is the Real-Time Generator Cost Guarantee (RT-GCG) program?

The Real-Time Generation Cost Guarantee (RT-GCG) program ensures sufficient generation is available to meet expected demand and operating reserve requirements on a daily basis and is a key component in demonstrating compliance with mandatory continent-wide operational planning standards. The RT-GCG program does this by guaranteeing certain start-up costs to participants who otherwise might not commit their units if they were not certain they would be able to recover these costs.

The Information Electricity System Operator (IESO) is making fundamental changes to the electricity market that will include replacing the RT-GCG program with a more efficient and transparent form of unit commitment. Until fundamental changes can be made, the RT-GCG program is necessary to maintain the reliability of our electricity system and comply with mandatory continent-wide power system reliability standards.

If pressed, additional background information:

The IESO-administered markets select and schedule just enough resources to meet energy and operating reserve demands every five minutes. The IESO has to be prepared for changes, both expected and unexpected, to the electricity system in order to maintain reliability. Having

additional resources on standby allows IESO to effectively meet those changes, without reducing reliability or causing significant price fluctuations.

Gas generators typically perform this function and they can take several hours to start and synchronize to the grid. During this period, these generators incur costs to start up and idle that they might be unable to recover through market revenues. The RT-GCG addresses this by covering certain costs should market revenues fall short. Without this program, IESO would be unable to ensure that generators are on standby to maintain reliability and would have to manage them in a less efficient manner, resulting in higher costs and negative impacts on reliability for Ontario and its neighbours.

Since the blackout in 2003, all system operators are required to create operating plans for each day that clearly demonstrate their ability to maintain reliability for the region. Other system operators have similar approaches that commit generators and compensate them for starting up and being on standby.

The IESO introduced the Spare Generation On-Line (SGOL) program in 2003, now called the Real-Time Generation Cost Guarantee (RT-GCG) program.

Q. Why hasn't the IESO eliminated the RT-GCG program?

The Real-Time Generation Cost Guarantee (RT-GCG) program ensures sufficient generation is available to meet expected demand on a daily basis and is a key component in demonstrating compliance with mandatory continent-wide operational planning standards. The RT-GCG program does this by guaranteeing certain start-up costs to participants who otherwise might not commit their units if they were not certain they would be able to recover these costs.

The IESO is making fundamental changes to the electricity market that will include replacing the RT-GCG program with a more efficient and transparent form of unit commitment.

Until fundamental changes can be made, the RT-GCG program is necessary to maintain the reliability of our electricity system and comply with mandatory continent-wide power system reliability standards.

The IESO will continue to engage with the Market Surveillance Panel (MSP) throughout this process.

Q. What improvements have been made to the RT-GCG program?

Over the years a number of changes have been made to the Real-Time Generation Cost Guarantee (RT-GCG) program, including changes to eligibility and cost submissions.

The IESO now pre-approves 14 of 15 eligible costs, removing the potential for overpayments and the need for after-the-fact audits for these components.

The IESO is making fundamental changes to the electricity market that will include replacing the RT-GCG program with a more efficient and transparent form of unit commitment. Until fundamental changes can be made, the RT-GCG program is necessary to maintain the reliability of our electricity system and comply with mandatory continent-wide power system reliability standards.

Furthermore, the Enhanced Real-Time Unit Commitment initiative of Market Renewal will replace the current RT-GCG program with a transparent and competitive mechanism that will ensure reliability through a more efficient commitment of resources near real time. Final decisions and high level design are expected by Q3 2018; implementation of initiative is expected in 2020.

Q. What is a timeline of events for changes made to the RT-GCG program?

The Real-Time Generation Cost Guarantee (RT-GCG) program chronology includes:

- 2003: the RT-GCG program is created, then known as the Spare Generation Online Program
- 2009: More stringent eligibility requirements introduced to the RT-GCG
- 2011: The IESO commences audits of the RT-GCG program
- 2012: Revisions to eligibility and cost submissions
- 2013: The IESO completes onsite work for most audits and compiles preliminary findings
- 2014: The IESO commences settlement negotiations with a range of program participants
- 2014: The IESO issues "Interpretation Bulletin" to clarify eligible costs
- 2016: RT-GCG program costs are \$23 million compared with \$61 million in 2014
- 2017: New cost recovery framework is created where 14 of 15 cost components are pre-approved
- 2017: RT-GCG program costs are \$22 million compared with \$61 million in 2014

Q. The Market Surveillance Panel (MSP) states the Independent Electricity System Operator (IESO) does not need to reimburse generators for operating and maintenance costs through the RT-GCG program. Why does IESO think otherwise?

Substantially reducing generator incentives, as recommended by the MSP, could result in insufficient generation being available to reliably meet electricity demand. This would negatively impact reliability and impair IESO's ability to meet continent-wide planning requirements. Therefore, IESO will continue to allow the recovery of operating and maintenance costs. However, the IESO is currently working with stakeholders to design and implement fundamental and enduring changes to Ontario's electricity market that will address the report's findings by introducing a more efficient real-time commitment program.

When the Real-Time Generation Cost Guarantee (RT-GCG) program was first introduced, 80 per cent of the starts under the program were for coal-fired units. By 2009, coal-fired generation was being replaced by natural gas-fired generation, which has different operating characteristics and incurs more costs when starting up compared to coal-fired generation.

As IESO began to rely less on coal-fired generation, there became an increasing need to make changes to the program parameters and incentives to ensure that resources were available when needed.

In 2009, IESO addressed this need by introducing more stringent eligibility criteria to make better use of existing assets while allowing the recovery of incremental operating and maintenance costs to ensure that resources still were incented sufficiently and that the program continued to meet its reliability objectives.

Q. Is it true that there have been \$260 million in overpayments through the Real-Time Generation Cost Guarantee (RT-GCG) program?

The Independent Electricity System Operator (IESO) provided the Office of the Auditor General with the \$260 million figure, but noted that it was an extreme and unlikely figure – the highest possible in a range.

The IESO's estimate of ineligible costs is closer to \$200 million over a 10-year period, of which we've recovered approximately 85 per cent of, or \$168 million.

Two-thirds of these ineligible costs were submitted by one generator, who was fined an additional \$10 million for failing to provide true, correct and complete information to the best of its knowledge.

Q. Why is there a difference between the AG's number and IESO's? Why is there a \$60-million gap between the two?

It is IESO's position that the \$260 million figure is not an accurate representation of the total amount of ineligible costs. This number was provided to the AG as a partial and initial estimate, but also as a maximum and unlikely figure – the highest possible in a range.

The IESO's Market Assessment and Compliance Division (MACD) advised AG staff that the total ineligible costs as determined by an independent adjudicator would likely be significantly less.

The final total of ineligible costs is highly dependent on a range of variables including debates related to accounting treatments of costs and legal arguments around rule interpretations.

The IESO's estimate of ineligible costs is closer to \$200 million over a 10-year period, of which we've recovered approximately 85 percent of or \$168 million.

Q. Why is it a range? You don't know for certain how much you overpaid?

That number is highly dependent on a range of variables including debates related to accounting treatments of costs and legal arguments around rule interpretations.

Where the estimated full costs were not recovered, the potential litigation risks and costs were assessed to be higher than what might reasonably be expected to be recovered. Any attempt to recover additional costs was likely to result in a worse outcome for ratepayers.

The costs we recovered through negotiated settlements are well within range of settlements that occur in contested law or regulatory enforcement contexts.

Q. Why were overpayments allowed to happen?

Cost submissions and payments were made in close proximity and audited after-the-fact. This is similar to how the CRA income tax process works whereby submissions are presumed to be correct until such time as audits and evaluations take place by CRA audit staff.

However, changes to the program in 2009 resulted in unexpected requests for cost recovery. The IESO quickly sought to address ineligible cost submissions and use its authority to recover as many costs as possible.

Two-thirds of these ineligible costs were submitted by one generator, who was fined an additional \$10 million for failing to provide true, correct and complete information to the best of its knowledge.

The IESO now pre-approves 14 of 15 eligible costs, removing the potential for overpayments and the need for after-the-fact audits for these components.

Q. Has IESO recovered all the money overpaid through the RT-GCG program? Why not?

The number of ineligible costs is highly dependent on a range of variables including debates related to accounting treatments of costs and legal arguments around rule interpretations.

Where the estimated full costs were not recovered, the potential litigation risks and costs were assessed to be higher than what might reasonably be expected to be recovered. Any attempt to recover additional costs was likely to result in a worse outcome for ratepayers.

The costs we recovered through negotiated settlements are well within range of settlements that occur in contested law or regulatory enforcement contexts.

The IESO now pre-approves 14 of 15 eligible costs, removing the potential for overpayments and the need for after-the-fact audits for these components.

Q. Why hasn't IESO provided data to the Market Place Surveillance Panel (MSP) to support its claims about Real-Time Generation Cost Guarantee (RT-GCG)?

On April 5, 2018, the Independent Electricity System Operator (IESO) will present to the MSP a detailed analysis supporting the rationale for its previous assertions that a real-time generator commitment mechanism (currently the RT-GCG program) is necessary to allow IESO to comply with North American power system reliability standards and ensure a reliable supply of electricity for Ontarians.

The IESO and MSP agree that there is a need to manage changing system conditions between day-ahead commitments and real time. The IESO meets this need through the RT-GCG program and will continue to do so until broader, more fundamental and enduring changes can be made that will address the report's findings.

The IESO has provided its rationale for the continued need for RT-GCG, explaining that a mechanism to ensure resource availability to meet the change in demand between day-ahead commitments and real time is both necessary and consistent with industry practice. The IESO also provided an assessment of the need for the GCG program through a public stakeholder engagement exercise that reviewed generation guarantee programs.

Q. Did IESO recover the money spent on car washes, carpet cleaning, road repairs, landscaping, scrub gear, raccoon traps, coveralls and parkas?

Yes – these costs were identified by the Independent Electricity System Operator (IESO) audits and recovered.

Q. How do generators submit costs to the RT-GCG program?

During the time period covered by IESO's audits, program participants submitted aggregated cost amounts for fuel and operating & maintenance (O&M) cost(s) in relation to Real-Time Generation Cost Guarantee (RT-GCG) program starts. The IESO reimbursed participants for those costs, subject to being audited and trued-up later on.

The IESO also recently implemented a new cost recovery framework in which IESO now pre-approves 14 of 15 eligible costs, removing the potential for overpayments and the need for after-the-fact audits for these components. Fuel and O&M costs are now broken down into 15 distinct and clearly defined cost components that are eligible for recovery.

Q. Why didn't IESO review costs initially before paying them?

Some changes to the Real-Time Generation Cost Guarantee (RT-GCG) program in 2009 resulted in unexpected requests for cost recovery. This was when we exercised our authority to audit submissions and create a public stakeholder engagement to review the program.

The IESO has since implemented a new cost recovery framework in which IESO pre-approves 14 of 15 eligible costs, removing the potential for overpayments and the need for after-the-fact audits for these components.

Q. Why didn't you audit the Real-Time Generation Cost Guarantee (RT-GCG) program until 2011?

Participation in the RT-GCG program increased considerably in the late 2000s as more natural gas generators were brought online to help support the reliable operation of the electricity system.

The IESO's MACD monitoring team highlighted an increase in RT-GCG payments in 2009 and provided this information to the MSP, after which the MSP reported on this trend. The MACD enforcement section at the same time initiated an audit program of all participants and concluded that overpayments were made to several participants of the RT-GCG program.

The majority of the estimated overpayments were attributed to one participant.

Q. How did the Independent Electricity System Operator (IESO) discover the overpayments?

Staff of IESO's Market Assessment and Compliance Division (MACD) monitors the market as part of its appointed role assessing market performance. It provides its findings to the Ontario Energy Board's (OEB) Market Surveillance Panel (MSP), with which MACD closely works. MACD may direct that enforcement actions, such as audits, be conducted. MACD has special

divisions that conduct investigations and audits, again similar to what CRA does with respect to income tax submissions.

The MACD monitoring team highlighted an increase in Real-Time Generation Cost Guarantee (RT-GCG) payments in 2009, after which the MSP reported on this trend. The MACD then initiated an audit and discovered the overpayments of the RT-GCG program.

Q. How will the Independent Electricity System Operator (IESO) prevent participants from submitting inaccurate costs in the Real-Time Generation Cost Guarantee (RT-GCG) program going forward?

The IESO now pre-approves 14 of 15 eligible costs, removing the potential for overpayments and the need for after-the-fact audits for these components. This new cost recovery framework was implemented on August 1, 2017.

The IESO is making fundamental changes to the electricity market that will include replacing the RT-GCG program with a more efficient and transparent form of unit commitment. Until fundamental changes can be made, the RT-GCG program is necessary to maintain the reliability of our electricity system and comply with mandatory continent-wide power system reliability standards.

Q. Are the RT-GCG audits finished?

Audits occur on an ongoing basis. However, under a new cost recovery framework implemented on August 1, 2017, eligible costs are now set and approved in advance of participating in the program for each program participant. This change removed the potential for overpayments and the need for after-the-fact audits for these components.

Q. What is the one cost component that is still subject to audit?

The only value that is not pre-approved is the quantity of natural gas, or other fuel, consumed during the eligible period. This value is highly variable with each start and is therefore not appropriate for establishing a pre-approved value. The price of the gas, or other fuel, is a pre-approved value. All costs are what the Independent Electricity System Operator (IESO) believes to be reasonable and eligible for recovery.

Q. Who are the market participants who submitted ineligible costs?

Audit information is confidential under the provisions of the *Market Manual, Market Rules and Electricity Act, 1998*.

Furthermore, releasing the names of these market participants would violate our settlement agreements and market rules.

Q. Is it true that generators who received RT-GCG payments were called on only one percent of the time? Is it true that the reliability benefits of the GCG program are not commensurate with the cost?

The Real-Time Generation Cost Guarantee (RT-GCG) program acts as insurance by ensuring sufficient generation is available to balance supply and demand as conditions change closer to real time and is a key component of meeting mandatory continent-wide operation planning standards. Like insurance, the value is in the ability to manage the risk of events that don't

happen frequently but can have serious consequences when they do. As such, usage of the RT-GCG program in past years is not an indication of its value.

As the Market Surveillance Panel (MSP) report acknowledges, the Independent Electricity System Operator (IESO) has to manage changing conditions between day-ahead commitments and real time. The RT-GCG program meets this need.

Eliminating the RT-GCG program could result in insufficient generation being available to reliably meet Ontario electricity demand. This would negatively impact reliability and impair the IESO's ability to meet continent-wide planning requirements.

Q. Do other jurisdictions have a Real-Time Generator Cost Guarantee (RT-GCG) program?

Every North American jurisdiction has a need to ensure sufficient generation is available to balance supply and demand as conditions change closer to real time and to meet mandatory continent-wide standards for operation planning. This need is met differently across jurisdictions.

The Independent Electricity System Operator (IESO) currently meets this need partly through the Real-Time Generation Cost Guarantee (RT-GCG) program and is also working with stakeholders through the Market Renewal initiative to design and implement changes to Ontario's electricity market that will create efficiencies in how this need is met.

Congestion Management Settlement Credits

Q. What are Congestion Management Settlement Credits (CMSC), referred to in the report as the Lost Profit Recovery Program?

Congestion Management Settlement Credits (CMSC) are paid to market participants, like generators and some large consumers, when they are scheduled by the Independent Electricity System Operator (IESO) to consume or inject when they would otherwise be doing so at an operating loss. Instances where CMSC are paid are a result of system constraints, such as transmission line limits.

For example, if a generator submitted an offer to produce power at a cost that was above the market clearing price, it would typically not be scheduled to produce power. However, if transmission limits in another area prevented a lesser-cost generator from delivering energy, the higher-cost generator may be told it must produce to maintain local reliability. In this example, a CMSC payment would make up the difference between the market clearing price and the price at which the generator had originally offered its power.

The payment ensures the generator complies with IESO instruction and produces the power needed to maintain reliability by giving it the revenue it had originally said it required to produce.

Q. Why doesn't the IESO eliminate Congestion Management Settlement Credits (CMSC)?

Congestion Management Settlement Credits (CMSC) payments are necessary to incentivize resources to comply with the Independent Electricity System Operator (IESO) dispatch. These are generally costs associated with ensuring the reliability of Ontario's electricity system but not reflected with the energy market clearing prices.

According to IESO, eliminating CMSC under the current market structure would undermine grid operations as suppliers would refuse to follow dispatch instructions if they were asked to operate at a loss. This would challenge the reliability of Ontario's electricity system and impair our ability to meet North American power system reliability standards. Until fundamental changes can be made to the electricity market, RT-GCG and CMSC will continue to be needed.

Fundamental changes to Ontario's electricity market are being made through a Market Renewal Program. The Market Renewal Program will provide an enduring solution to the inefficiencies discussed in the AG's report as well as deliver a range of efficiency savings, from better scheduling and dispatching resources to more efficiently procuring the capacity Ontario needs. In total, Market Renewal will result in up to \$5.2 billion in savings over a 10-year period, the majority of which will be realized by ratepayers.

Q. When will Market Renewal replace CMSC and RT-GCG?

Work is underway and we expect to begin the detailed market design and implementation phase in 2019. Changes to the foundation of the electricity market take time. We want to make sure we get it right and don't put in place another band-aid solution with continuing inefficiencies at the expense of ratepayers.

Q. What steps has the IESO taken to address inefficiencies with CMSC?

The Independent Electricity System Operations (IESO) has made more than a dozen changes to market rules since market opening that improved program effectiveness and transparency, increased efficiency of Congestion Management Settlement Credits (CMSC), and reduced costs – many of these changes are responsive to Market Surveillance Panel (MSP) recommendations.

A December 2016 MSP report noted: "many of the most problematic issues associated with the CMSC regime have been brought to an end – in large measure as a result of the Panel having identified these situations, and the IESO having acted to eliminate them."

Remaining inefficiencies are best addressed by the broad and fundamental market design changes the IESO is pursuing through Market Renewal.

Changes over the years have eliminated inappropriate CMSC payments resulting from:

- Artificially raising or lowering offers into the market, when the participant is expecting to be constrained-on or off (2004, 2005, 2006, 2010);
- Offering into the market over interties to maximize CMSC or with limited intention of having to deliver power (2006, 2011, 2012, 2015);
- Safety, environmental or legal reasons that result in a facility unable to follow dispatch (2003, 2011); and
- Units that are slow to come offline when no longer economic (2010, 2015).

Going forward, the Single Schedule Market initiative of Market Renewal will eliminate the CMSC Program. Final decisions and high level design are expected by Q3 2018; implementation of initiative is expected in 2020.

Q. Why has the Independent Electricity System Operator (IESO) paid about \$1.6 billion for Congestion Management Settlement Credits (CMSC) – aren't these wasted costs?

These payments have not resulted in additional costs to consumers.

These are mostly costs that are inherent in any electricity system, reflecting constraints, such as transmission line limitations, and measures required to maintain reliability.

As the Market Surveillance Panel (MSP) has acknowledged, some costs associated with CMSC will continue to exist in different forms even with the replacement of the current market design.

A December 2016 MSP report noted: “many of the most problematic issues associated with the CMSC regime have been brought to an end – in large measure as a result of the Panel having identified these situations, and the IESO having acted to eliminate them.”

As part of Market Renewal, IESO is working to make sure that the market is more efficient so that these costs are as low. Market Renewal will result in a better market design that will schedule resources more efficiently and the opportunity for inappropriate out of market payments is largely eliminated.

However, many of the existing CMSC costs are legitimate operating costs that will still be paid by consumers and are necessary to maintain reliability (i.e., generator start-up costs will be reflected in offer and bid prices and recovered from consumers through the market clearing price).

Q. Why has it taken so long to begin fixing market inefficiencies? Wasn't CMSC supposed to be temporary?

Adopting the current structure at market opening in 2002 was a deliberate decision to “simplify” the transition from the wholly regulated system. The two-schedule system allowed for a smooth transition to an open market. IESO has since made over a dozen changes to Congestion Management Settlement Credits (CMSC) that have made it more efficient.

There have been many significant developments in electricity system over the past decade, including the phase out of coal-fired generation and replacement with renewable, natural gas-fired, nuclear and demand response resources. Now we're in a stable supply situation that is expected to continue into the 2020s, making now an opportune time to pursue more fundamental changes to the electricity market that will make sure these costs are reflected in the market price instead of through less efficient out-of-market payments.

Q. Is it true that Ontario ratepayers have paid \$1.6 billion in CMSC costs since market opening?

Congestion Management Settlement Credits (CMSC) payments are necessary to incentivize resources to comply with the Independent Electricity System Operator (IESO) dispatch. These are generally costs associated with ensuring the reliability of Ontario's electricity system, but not reflected with the energy market clearing prices.

According to IESO, eliminating CMSC under the current market structure would undermine grid operations as suppliers would refuse to follow dispatch if they were asked to operate at a loss. This would challenge the reliability of Ontario's electricity system and impair our ability to meet North American power system reliability standards.

As stated by the Market Surveillance Panel (MSP), some costs associated with CMSC will continue to exist in different forms even with the replacement of the current market design. These are costs that are inherent in any electricity system, reflecting constraints, such as transmission line limitations, and measures required to maintain reliability.

The IESO has taken numerous steps over the years to improve the efficiency of CMSC and limit gaming opportunities. Remaining inefficiencies are best addressed by the broad and fundamental market design changes the IESO is pursuing, which will see CMSC costs reflected in the market price instead of through out-of-market payments.

Other

Q. Why are market participants who have misused IESO programs allowed to participate in the market renewal working group?

The Independent Electricity System Operator (IESO) accepts feedback from a broad range of stakeholders, including residential consumers, industrial consumers, distributors, transmitters, generators, and other market participants. But at the end of the day, the final decision is made by us.

Two market participants who were found to have ineligible costs have stepped down as Chairs from the market renewal working group. One of these members is still on the group but not as a chair.

The IESO will continue to evaluate the membership and structure of the group. For example, a new low-volume customer representative has been recently added.

It is also worth noting that the working group also includes a member from the OEB's Market Surveillance Panel (MSP).

Q. Why are generators allowed to have so much influence in changing market rules?

A Technical Panel advises about market rule changes and includes representation from residential consumers, industrial consumers, distributors, wholesalers, transmitters, generators and other market participants. So we look for input from a wide variety of stakeholders. But at the end of the day, the final decision is made by the IESO Board of Directors.

Q. But will you remove those who misused the Independent Electricity System Operator (IESO) programs from the market renewal working group?

Two market participants who were found to have ineligible costs have stepped down as Chairs from the market renewal working group. One of these members continues to serve on the group but not as a chairperson.

The IESO will continue to evaluate the membership and structure of the group. For example, a new low-volume customer representative has been added.

It is also worth noting that the working group also includes a member from the OEB's Market Surveillance Panel (MSP).

Q. Why are low volume consumers not better represented?

The Independent Electricity System Operator (IESO) recently announced the appointment of a low-volume consumer representative on IESO's market renewal working group to ensure that perspective was being captured.

There currently is representation for residential consumers on IESO's Technical Panel and there are multiple consumer representatives on its Stakeholder Advisory Committee, two key vehicles for receiving input into IESO market rules and its decision-making.

The IESO is undertaking a general review of its engagement strategy. The IESO expects to communicate and implement updates to its engagement strategy by Q2/Q3 2018. According to IESO, the engagement strategy will continue to be aligned with IESO engagement principles and ensure wide representation from our market participants, sector stakeholders and other stakeholders such as low volume consumers.

Q. What is Market Renewal?

Market Renewal is a collaborative effort between the Independent Electricity System Operator (IESO) and stakeholders to pursue enhancements to Ontario's electricity market that will address inefficiencies, put downward pressure on electricity costs and lay a foundation that will prepare us to meet future electricity needs as the sector evolves.

Market Renewal will incorporate lessons learned in Ontario and best practices from other jurisdictions to achieve a "made-in-Ontario" market design tailored to our province's needs. The initial findings from the Market Renewal benefits case show potential for cost savings that will be realized by both consumers and suppliers. Cost savings are achieved through the better utilization of existing assets, greater competition among resources, a reduced need to build new resources and a more flexible procurement process that will better reflect system needs.

Market Renewal is estimated to result in up to \$5.2 billion in savings over 10 years, the majority of which will be realized by ratepayers.

This will include replacing the RT-GCG program with a more efficient and transparent mechanism and eliminating CMSC.

Q. Is the IESO doing anything to ensure that the Market Renewal Initiative considers and protects all ratepayers' interests?

The initial findings from the Market Renewal benefits case show potential for cost savings that will be realized by both consumers and suppliers. Cost savings are achieved through the better utilization of existing assets, greater competition among resources, a reduced need to build new resources and a more flexible procurement process that will better reflect system needs.

The Independent Electricity System Operator (IESO) will continue to ensure that its stakeholder engagement processes, including Market Renewal, seek representation from low-volume consumers where appropriate. The IESO's stakeholder engagement processes seek the input

from a wide representation of participants – generators, traders, consumers, stakeholders, First Nations and Metis Peoples, communities, and the general public.

One of the principles, which applies to Market Renewal, seeks to ensure adequate representation in each engagement of the public or those that have a tendency to remain silent or reluctant to engage.

The IESO recently undertook five regional forums across the province, to address the concerns and seek input on developing solutions to improve our system locally and province-wide. These forums provided the opportunity to meet face to face and seek input from municipalities, consumers, First Nations and Metis peoples, as well as the general public.

The IESO is undertaking a general review of its engagement strategy. The IESO expects to communicate and implement updates to its engagement strategy by Q2/Q3 2018. The engagement strategy will continue to be aligned with the IESO engagement principles and ensure wide representation from our market participants, sector stakeholders and other stakeholders such as low volume consumers.

If pressed additional background:

Ontario's electricity market was designed in the late 1990s and introduced in 2002, when the electricity landscape looked very different from today. The elimination of coal, integration of renewables, increase in distributed resources, and growing role of the consumer has dramatically changed the dynamics of Ontario's electricity system.

Inefficiencies have been identified over the years through the work of the Electricity Market Forum, the Market Surveillance Panel (MSP), IESO studies and stakeholder input. The IESO and its stakeholders have worked together to improve different aspects of the market, but more fundamental changes are required to address remaining inefficiencies.

Ontario is now in a stable supply situation that is expected to continue until the mid-2020s, making this an opportune time to consider and implement needed market design changes.

Q. What is the Market Assessment and Compliance Division (MACD)?

IESO's Market Assessment and Compliance Division (MACD) monitors the operation of Ontario's electricity market, fostering compliance with the Ontario market rules and North American reliability standards.

MACD does this through its prevention, monitoring, auditing, investigations and enforcement activities. It performs audits and investigations into these matters.

Q. What is the IESO's position on the AG's recommendation that the MACD be made more independent?

The Independent Electricity System Operator (IESO) has indicated that it agrees with the Auditor General's recommendation. IESO's independent Board of Directors approved in October 2017 a new reporting structure whereby the Director of MACD will report directly to the IESO Board of Directors.

Q. Does MACD have the resourcing it needs?

IESO has indicated that it agrees with the Auditor General's recommendation that a review of sufficiency of enforcement resourcing be conducted, as it is consistent with recent increases in staff at Market Assessment and Compliance Division (MACD) and the process of ongoing review of priorities.

According to IESO, attracting staff with expertise in market rules and investigations will be a priority. As part of the IESO Business Planning for 2018, the IESO is evaluating the risk profile of a variety of its priorities, including the enforcement of market rules. As part of this exercise, consideration is being undertaken to both increase the total level of resources made available for enforcement, as well as the conversion of some current resources to full-time and non-temporary staff.

Like all other such market oversight agencies, MACD does not have the resources to pursue every single possible violation of the market rules. Many of the issues cited in the AG Report which it recommends could lend itself to further investigation are not necessarily violations of the rules. In all cases, they also involve market outcomes that will be remedied via Market Renewal.

Q. The OAG finds that IESO hasn't been distributing resources in an effective way to ensure all investigations into improper costs being claimed are being completed. In fact, the OAG states that only one in five potential cases identified by the Director of the Oversight Division can be investigated, because of lack of resources.

Attracting staff with expertise in market rules and investigations will be a priority. The IESO has recently increased staff in MACD. As part of our business planning process for 2018, IESO is also evaluating the risk profile of a variety of its priorities, including the enforcement of market rules. As part of this exercise, consideration is being undertaken to both increase the total level of resources made available for enforcement, as well as the conversion of some current resources to full-time and non-temporary staff.

Q. What is the scale of this problem (i.e., how many investigations should have been done)? And what is IESO's plan to deal with it? Why does IESO's oversight team not have the proper IT system to do their investigations?

The IESO has investigated nine participants and recovered the majority of ineligible costs. The IESO now pre-approves 14 of 15 eligible costs, removing the potential for overpayments and the need for after-the-fact audits for these components. Further and more fundamental changes will be made through the Market Renewal Program.

As part of the IESO Business Planning for 2018, the IESO is evaluating the risk profile of a variety of its priorities, including the sufficiency of resources directed towards MACD's IT support and replacement of the computer system.

Q. With so many stones left unturned, will IESO commit to undertaking a more fulsome audit of generators to ensure ineligible claims are recovered? If given more resources and authority, will the system operator take action on these uncompleted audits?

The IESO has concluded negotiated settlements with participants found to have submitted ineligible costs and has recovered the majority of them. The IESO now pre-approves 14 of 15

eligible costs, removing the potential for overpayments and the need for after-the-fact audits for these components. Further and more fundamental changes will be made through the Market Renewal Program.

Q. What is the impact on ratepayers of CMSC and RT-GCG?

In 2016, there was \$112 million in CMSC costs and \$23 million in GGC costs. These are costs that were required to maintain the reliability of the electricity grid.

To put that into context, \$17 billion flowed through the electricity market over that time.

Regarding the Release of Company Names

Q. Can you release all audit information now?

Individual audit information is confidential under the provisions of the *Market Manual, Market Rules and Electricity Act, 1998*.

As part of its role overseeing Ontario's electricity market, the Independent Electricity System Operator (IESO) receives a lot of confidential and commercially sensitive information. This includes information related to individual market participants' offers and bids, and information related to audits.

We need to respect the confidential and commercially sensitive nature of information we receive from market participants.

Releasing the names of the market participants would violate our settlement agreements and market rules.

Q. Did you not release the names before because you needed permission?

Audit information is confidential under the provisions of the *Market Manual, Market Rules and Electricity Act, 1998*.

Releasing the names of the market participants would violate our settlement agreements and market rules.

Q. How many of these generators are on the market renewal working group?

The Independent Electricity System Operator (IESO) seeks feedback from many stakeholder segments, including residential consumers, businesses, communities, transmitters, generators and distributors.

The market renewal working group (MRWG) is one of many stakeholder feedback groups we have. The MRWG is a representative stakeholder forum created to guide, advise and inform IESO on important strategic, policy and design issues that will impact the overall success of market renewal initiative.

The MRWG is made up of a cross-section of different participants from across the sector, including generators, LDCs, associations, consumers groups, as well as the MSP.

We recently announced the appointment a low-volume consumer representative on our MRWG to ensure that perspective was being captured.

These representatives are not the decision makers – rather, we listen to their feedback and consider their input. But at the end of the day, the IESO has the final say about market design considerations.

Q. Will you recover the remaining \$32 million?

These costs were disputed by market participants and negotiated settlements were reached whereby the Independent Electricity System Operator (IESO) received about 85 per cent of what it deemed to be ineligible costs.

An example of a disputable cost would be whether certain facility maintenance costs were related to the starting-up of the facility, which would be covered by the RT-GCG program, or whether those maintenance costs were related to the regular operation of the facility.

So IESO identified what it believed to be ineligible RT-GCG costs, and then entered negotiated settlements to discuss costs that were disputed and reach agreements for repayment.

Where the estimated full costs were not recovered, the potential litigation risks and costs were assessed to be higher than what might reasonably be expected to be recovered. Any attempt to recover additional costs was likely to result in a worse outcome for ratepayers.

The costs we recovered through negotiated settlements are well within range of settlements that occur in contested law or regulatory enforcement contexts.

Q. Did Ontario Power Generation (OPG) pay back the entire amount of ineligible costs?

We can't release information specific to individual audits.

But we can say that, as a whole, we received about 85 per cent of what we deemed to be ineligible costs across the nine participants.

Cybersecurity – General

Q. Why is cybersecurity such an important issue for the Independent Electricity System Operator (IESO)?

The IESO takes its responsibility of assuring the reliability of the IESO-controlled grid very seriously.

Ontario depends on the reliable functioning of its critical infrastructure, and electricity is one of our most vital systems. Being a reliability coordinator goes beyond just the flow of electrons.

In an increasingly interconnected, distributed and widespread sector, maintaining the safe and sustainable operation of the power grid extends to being best-in-class in cybersecurity.

The IESO complies with all cybersecurity standards set forth by the North American Electric Reliability Corporation (NERC) and in 2016 began operating under an even more robust security governance framework, based on the National Institute of Standards and Technology

(NIST) Framework for Improving Critical Infrastructure Cybersecurity. This framework is considered absolute best practice on cybersecurity across all industries.

The IESO has also taken a leadership role in cross-sector cybersecurity awareness through industry capacity building sessions, the promotion of leading security standards and best practices, and collaboration with organizations and experts in cyber- and IT security policy from across North America.

Q Does the IESO have a tested cyber incident response plan?

Yes, under North American Electric Reliability Corporation (NERC) rules the Independent Electricity System Operator (IESO) is required to develop and maintain cybersecurity incident response plans. This includes a variety of response actions, including roles and responsibilities of incident response teams, incident handling procedures, and communication plans. These exercises represent relevant cybersecurity risks and support the ongoing continuous improvements of our processes and technologies.

The IESO recently participated in “GridX 4,” a biennial exercise designed to simulate cyber/physical attacks on electric and other critical infrastructures across North America. These sessions provide exercise scenarios that link physical and cyberattacks with how system operators would respond to mitigate the impact of these attacks on bulk power system reliability.

The IESO has also shared publicly a series of incident response playbooks that define the procedures for security event investigations, which enables a responder to follow a structured method for validating and responding to each unique security alert.

Q. How is the Independent Electricity System Operator (IESO) audited for compliance with cybersecurity?

In alignment with the IESO’s role in delivering superior reliability in a changing environment, every three years, the organization undergoes an audit of its compliance with North American Reliability Corporation (NERC) standards.

This includes two separate audits – one for Operations and Planning standards and a separate audit of Critical Infrastructure Protection (CIP) standards. Cybersecurity requirements fall under the CIP standards.

The purpose of these audits is to ensure that the organization is meeting the requirements of standards set for all users, owners and operators of the bulk electricity system.

The most recent audit occurred in October 2017 and was conducted by the Northeast Power Coordinating Council (NPCC).

For CIP, this was the first audit under the new CIP V5 standards, which came into effect on July 1, 2016. The purpose of CIP V5 is to protect any cyber assets that can affect bulk electric system reliability within 15 minutes of unavailability, mis-operation or misuse.

The audit concluded that IESO is in compliance with applicable standards related to cybersecurity.

In addition to ongoing internal compliance, IESO also engages a professional consulting service provider to perform readiness and compliance assessments.

Cybersecurity Issues Specific to the AG Report

Q. Does the Independent Electricity System Operator (IESO) agree with the characterizations made by the Auditor General about its IT security and cyber management practises?

The IESO welcomes the Auditor General's report and the opportunity to provide responses, in part to clarify the IESO's existing processes, but also to indicate a number of specific initiatives that are either currently underway or are scheduled in the near term.

The Auditor General accurately identified that IESO complies with rigorous cybersecurity industry standards overseen by the North American Reliability Corporation (NERC).

Moreover, the electricity sector is unique in that it is the only critical infrastructure sector with mandatory and enforceable cybersecurity standards

Q. Does the IESO agree with the Auditor General's finding that the IESO should create a senior-level position dedicated to cybersecurity?

Prior to the release of the report, the Independent Electricity System Operator (IESO) initiated a recruitment process for a Chief Information Officer (CIO) with an increased focus on cybersecurity.

The successful candidate in the CIO position will be an experienced senior technology executive with a deep understanding of Critical Infrastructure Protection (CIP) environments, like IESO, and demonstrated experience in overseeing enterprise-wide cybersecurity management programs. The target date for the appointment of the CIO is by end of Q1 2018.

The IESO is also looking to establish a senior-level position for cybersecurity, reporting to the CIO, who will be responsible for the delivery and operations of IESO's cybersecurity program. The timing of the senior-level cybersecurity role is targeting Q1 2018.

If pressed, additional information:

The CIO will have cross-organizational influence to ensure that cybersecurity risk management is being addressed and integrated across all business units of the organization.

The CIO will report to IESO's Chief Executive Officer. This was an internal governance decision, made by the IESO's executive in collaboration with the board.

Effective cybersecurity management is also a collective responsibility that extends to all levels of the organization. The IESO provides its staff with compliance and awareness training on an annual basis.

Q. Does IESO agree with the Auditor's recommendation that IESO should increase the number of cybersecurity staff and engage an external IT cybersecurity vendor?

The Independent Electricity System Operator (IESO) is in the process of implementing an independent consultant's recommendation to increase the number of cybersecurity staff, in a manner consistent with the Auditor General's recommendation. The IESO intends to double the size of its current cybersecurity team in 2018.

The IESO has launched a competitive process to retain a cybersecurity third-party vendor that will, in conjunction with IESO staff, provide a robust security operations center enabling 24/7/365 real-time cybersecurity monitoring. The SOC vendor is expected to be in place in Q2 2018.

The IESO is also an active member of the North American Cybersecurity Mutual Assistance Program that provides access to cybersecurity specialists from over 150 North American utilities in the event of a cyber-incident.

Q. Does IESO agree with the Auditor's recommendation that IESO's IT department needs to involve its cybersecurity staff in the early stages of all IT projects that could pose cybersecurity risks?

It is the Independent Electricity System Operator's (IESO) current practice that security risk assessments are incorporated into IT project management practices.

The IESO also understands the complexity and evolutionary nature of cyber readiness and will continue to enhance its approach to ensure "cybersecurity by design" in all of its IT-related projects. This means ensuring that the cybersecurity requirements are being considered early in the process of any new IT program design and that sufficient cybersecurity staff are allocated at this important part of any project.

This will be further facilitated by the formation of the IESO's new Program Management Office, which will work to ensure a holistic view on all IESO projects, as well as the appointment of the CIO.

If pressed, additional information:

The incoming Chief Information Officer (CIO) and senior-level cybersecurity resource will establish effective governance, ensuring that security practices are being built-in to IESO's project management program and individual IT project lifecycles.

The IESO is also developing a best practice guide for the sector on cybersecurity risks in the supply chain. This would be applicable to the vendor supply chain that delivers industrial control system hardware, software, and computing and networking services associated with not only the bulk system operations, but traditional enterprise environments.

Q. Does IESO agree that it should procure technology that prevents and identifies breaches of confidential information and monitor staff access to confidential information?

The Independent Electricity System Operator (IESO) has procured robust detection technology that has the ability to not only identify unusual activity that could lead to breaches of confidential

information, but also malicious activity that could compromise the integrity of IESO IT environments.

Through the delivery of the Advanced Malware project, the detection technology is now in place, and in addition, all objectives identified in the business case for the project were met in 2017.

Q. Does IESO agree that it should encrypt all backup tapes and store them in a secure off-site location?

The Independent Electricity System Operator (IESO) has eliminated the use of tape-based backups in favour of system and data redundancy across two highly available and redundant data centers.

Q. Does IESO agree with the AG's recommendation to establish an external vendor cybersecurity policy; and have the cybersecurity team conduct a regular assessment of the security risk that external vendors pose to the IESO?

The Independent Electricity System Operator's (IESO) cybersecurity team works directly with the procurement and legal processes to ensure security requirements are met.

The IESO is also in the process of developing and implementing supply chain risk management measures to that comply with NERC Critical Infrastructure Protection Supply Chain risk standards, which will also include processes that are responsive to the recommendation.

In addition to that, IESO is expanding its cybersecurity governance framework over the next two to three years to meet the National Institute of Standards and Technology (NIST) Cybersecurity framework that will help assess and mitigate vendor risks to the supply chain. This framework will establish effective security governance around external vendors

The IESO is developing a best practice guide for the sector on cybersecurity risks in the supply chain. The target completion date for the report is Q3 2018.

Q. The Auditor's report identified a 2015 IESO breach where confidential contract information of a market participant was accessible to other participants. What happened, and how has/ will IESO prevent that from happening in the future?

The Independent Electricity System Operator (IESO) takes its responsibility of assuring the reliability of IESO-controlled grid very seriously and ensures compliance with North American cybersecurity standards

On September 14, 2015, IESO detected a technical issue that had caused its public reports site (reports.ieso.ca/public) to display the private reports and records of its Market Participants in addition to the standard public reports.

The issued occurred after IESO's IT group was troubleshooting intermittent outages on the new private reports site, which had been implemented about six weeks before.

In the process of troubleshooting the outages, a configuration error occurred, which essentially reversed the URLs for the public and private report sites.

As a result, access to the private reports site was open to the public for just under seven minutes. Upon discovery of the error, IESO immediately disabled all access to the report site until the configuration was corrected.

Subsequently, IESO put into place control measures through the report sites information migration process to prevent the issue from re-occurring.

CONFIDENTIAL

APPENDIX – IESO'S KEY MESSAGE FOR STANDING COMMITTEE ON PUBLIC ACCOUNTS CHAPTER 3 (MARKET OVERSIGHT AND CYBERSECURITY)

- Real-Time Generation Cost Guarantee Program (RT-GCG) = Standby Cost Recovery Program (AG)
- Congestion Management Settlement Credits (CMSC) = Lost Profit Recovery Program (AG)

KEY MESSAGES – GENERAL

- The Independent Electricity System Operator (IESO) supports the Ontario Energy Board's Market Surveillance Panel's (MSP) work and acknowledges the recommendation made by the Auditor General.
- The IESO carefully considers every MSP recommendation and its underpinning analysis and responds to each recommendation outlining the actions IESO will take in a letter directed to the Chair and CEO of the Ontario Energy Board (OEB).
- The IESO has been taking action to address market inefficiencies since market opening in 2002.
- Many improvements have been made over the years to reduce payments to the minimum necessary to operate the grid reliably.
- Fundamental changes to Ontario's electricity market are now being made as expeditiously as possible through the Market Renewal Program.
- We are in stable supply situation, making now the right time to make these changes.
- Until fundamental changes can be made, Real-Time Generation Cost Guarantee Program (RT-GCG) and Congestion Management Settlement Credits (CMSC) will continue to be needed to maintain reliability and meet North American reliability standards.
- Due to the changes that have been introduced, the RT-GCG program operates more efficiently today. Program costs have fallen from \$61million in 2014 to \$23 million in 2016 and \$22 million in 2017.
- A new cost recovery framework has removed the potential for overpayments and the need for after-the-fact audits for 14 of 15 cost components in the RT-GCG program.
- Generators who submitted and received ineligible costs through the GCG program were identified by IESO audits and the majority of costs (up to 85 per cent) were recovered.
- The Market Renewal Program will result in up to \$5.2 billion in savings over a 10-year period, the majority of which will be realized by ratepayers.
- Market Renewal savings come from better scheduling and dispatching resources, and more efficiently procuring the capacity Ontario needs.

- A low-volume consumer representative is on our Market Renewal Working Group to ensure that perspective is being captured.

KEY MESSAGES – REAL-TIME GENERATION COST GUARANTEE PROGRAM (RT-GCG)

- The Independent Electricity System Operator (IESO) administered markets select and schedule just enough resources to meet energy and operating reserve demands every five minutes.
- The IESO has to be prepared for changes, both expected and unexpected, to the electricity system in order to maintain reliability. Having additional resources on standby allows IESO to effectively meet those changes, without reducing reliability or causing significant price fluctuations.
- Gas generators typically perform this function and they can take several hours to start and synchronize to the grid. During this period, these generators incur costs to start up and idle that they might be unable to recover through market revenues. The Real-Time Generation Cost Guarantee Program (RT-GCG) addresses this by covering certain costs should market revenues fall short.
- Without this program, IESO would be unable to ensure that generators are on standby to maintain reliability and would have to manage them in a less efficient manner, resulting in higher costs and negative impacts on reliability for Ontario and its neighbours.
- Since the blackout in 2003, all system operators are required to create operating plans for each day that clearly demonstrate their ability to maintain reliability for the region. Other system operators have similar approaches that commit generators and compensate them for starting up and being on standby.
- The RT-GCG program ensures sufficient generation is available to meet expected demand on a daily basis and is a key component in demonstrating compliance with mandatory continent-wide operational planning standards.
- The IESO is making fundamental changes to the electricity market that will include replacing the RT-GCG program with a more efficient and transparent form of generator unit commitment.
- Until fundamental changes can be made, the RT-GCG program is necessary to maintain the reliability of our electricity system and comply with mandatory continent-wide power system reliability standards.
- The IESO has made changes over the years that have made the RT-GCG program more efficient and transparent today, including to eligibility and cost submissions.
- Program costs have fallen from \$61million in 2014 to \$23 million in 2016 and \$22 million in 2017. The IESO now pre-approves 14 of 15 eligible costs, removing the potential for overpayments and the need for after-the-fact audits for these components.
- Generators who submitted and received ineligible costs through the RT-GCG program were identified by IESO audits and the majority of costs were recovered.

- Two-thirds of ineligible costs were submitted by one generator, who was fined for failing to provide true, correct and complete information to the best of its knowledge.
- Where the estimated full costs were not recovered, the potential litigation risks and costs were assessed to be higher than what might reasonably be expected to be recovered. Any attempt to recover additional costs was likely to result in a worse outcome for ratepayers.

KEY MESSAGES – CONGESTION MANAGEMENT SETTLEMENT CREDITS (CMSC)

- Congestion Management Settlement Credits (CMSC) are paid to market participants, like generators and some large consumers, when they are scheduled by the Independent Electricity System Operator (IESO) to consume or inject when they would otherwise be doing so at an operating loss. Instances where CMSC are paid are a result of system constraints, such as transmission line limits.
- CMSC payments are needed to maintain the reliability of Ontario's electricity system. They are necessary to incentivize resources to comply with IESO dispatch instructions.
- These are mostly costs that are inherent in any electricity system, reflecting constraints, such as transmission line limitations, and measures required to maintain reliability.
- According to IESO, eliminating CMSC under the current market structure would undermine grid operations as suppliers would refuse to follow dispatch if they were asked to operate at a loss. This would challenge the reliability of Ontario's electricity system and impair our ability to meet North American power system reliability standards.
- CMSC will continue to be needed until fundamental changes can be made to the electricity market through the Market Renewal Program.
- The IESO has made more than a dozen market rules since 2003 that improved program effectiveness and transparency, increased efficiency of CMSC, and reduced costs – many of these changes are responsive to Ontario Energy Board's Market Surveillance Panel (MSP) recommendations.
- A December 2016 MSP report noted: "many of the most problematic issues associated with the CMSC regime have been brought to an end – in large measure as a result of the Panel having identified these situations, and the IESO having acted to eliminate them."
- As the MSP acknowledges, some costs associated with CMSC will continue to exist in different forms even with the replacement of the current market design.

KEY MESSAGES – IESO'S CYBERSECURITY PROGRAM

- The Independent Electricity System Operator (IESO) is working to shape the future cybersecurity landscape in Ontario's electricity sector. We're doing this by collaborating with policy makers from around the world and addressing emerging challenges and opportunities associated with an increasingly digital sector.
- The IESO is also driving continuous improvements in three key areas:

- o Strengthening our organization's security posture;
 - o Ensuring compliance while driving innovation; and
 - o Establishing strategic partnerships to innovate cyber defense.
- The IESO's new Chief Information Officer (CIO) will oversee our enterprise-wide cybersecurity management program and ensure that cybersecurity risk management is being addressed and integrated across all levels of the organization.
- To support our in-house team of cybersecurity specialists, IESO is establishing a robust security operations centre to provide 24/7 real-time cybersecurity monitoring that will assist with incident detection and response. This will help ensure that threats targeting data and assets are locked down and eliminated before they cause widespread damage and disruption.
- We have expanded our threat management and detection capabilities that protect our corporate network. This includes replacing traditional antivirus software with advanced endpoint malware protection technology. Studies put the number of security breaches originating at endpoints between 70-95 per cent. The IESO is making investments to close that gap over its network.
- The IESO has adopted a robust security governance framework that goes beyond current electricity sector standards and is based on the National Institute of Standards and Technology (NIST). This framework is considered the absolute best practice on cybersecurity across all industries and will help IESO remain current with the latest in cryptographic techniques, encryption, identity and access management and network security.
- The IESO brings together sector counterparts as well as the world's leading cybersecurity policy experts to stay up to date on best practices and trends in the emerging cyber-threat landscape. Our cybersecurity executive briefing was the first of its kind in Ontario's electricity sector, and we are developing a best practice guide for the sector on cybersecurity risks in the supply chain.
- The IESO has developed a collaborative legal framework with the Communications Security Establishment (CSE), Canada's cryptographic agency, internationally recognized for its cyber expertise. This framework will promote integrated information and data sharing in defending cyber-attacks. It has been leveraged by more than 25 utilities across Canada. The IESO will assist the CSE in expanding its cyber capabilities with respect to Ontario's electricity sector.
- The IESO is working with provincial government and electricity regulator to ensure cybersecurity defenses are providing effective oversight to mitigate cyber risks and threats at the distribution level. The IESO also works directly with Ontario's electricity distributors to provide training and best practices. The IESO shares and promotes best practice guides.

KEY MESSAGES – COMPLIANCE AND RELIABILITY

- Cybersecurity is a fundamental component of the Independent Electricity System Operator's (IESO) role in maintaining the safe and sustainable operation of Ontario's power grid. We make sure our network is secure by:
 - o Ensuring compliance with North American regulatory requirements and industry standards;
 - o Investing in new technology, techniques and training to ensure we are equipped with the best resources to combat cyber-threats;
 - o Collaborating with our sector counterparts as well as the world's leading cybersecurity policy experts to remain current on best practices and trends in the emerging cyber-threat landscape;
 - o Creating robust response capabilities by conducting cyber-incident scenario planning; and
 - o Incorporating a "cybersecurity by design" approach into IT program development.
- The IESO complies with a series of continent-wide cybersecurity standards, defined by a standards body called the North American Electric Reliability Corporation, or NERC.
- Ontario's generators, transmitters and other industry participants are required to implement and comply with these standards. Some of these standards include:
 - o Security management controls to protect critical cyber assets;
 - o Ongoing cyber vulnerability assessments;
 - o Cybersecurity incident response and recovery planning;
 - o Mandatory staff training and awareness programs; and
 - o Procedures to restore critical cyber assets.
- In 2016, IESO developed a renewed cybersecurity strategy that included the adoption of an even more robust security governance framework. It is based on the National Institute of Standards and Technology (NIST) Framework for Improving Critical Infrastructure Cybersecurity. This framework is considered absolute best practice on cybersecurity across all industries.
- In addition to continuously strengthening our protection and resilience to cyberattacks, the IESO plays a leadership role in the sector by supporting innovation and capacity building in the field of cyber threat management. We do this by:
 - o Providing collaborative forums to share best practices to address existing and emerging cybersecurity issues to improve cybersecurity within Ontario's electricity sector;

- o Hosting executive and board-level cybersecurity briefings to learn from cybersecurity experts from around the world to conduct productive, collaborative and forward-looking dialogues on key areas of cybersecurity; and
 - o Working directly with our reliability partners, like smaller utilities and sector participants, to address cybersecurity issues at all levels of the provincial system.
- Supporting the development of new policies and industry frameworks that focus on reliability, security and privacy.

CONFIDENTIAL

APPENDIX – KEY ISSUES FOR STANDING COMMITTEE ON PUBLIC ACCOUNTS CHAPTER 3 (MARKET OVERSIGHT AND CYBERSECURITY)

Real-Time Generation Cost Guarantee Program (RT-GCG) / Congestion Management Settlement Credits (CMSC) – IESO

The Auditor General's report highlight the follow issues with respect to the Independent Electricity System Operator's RT-GCG and CMSC. The AG Report is critical of the RT-GCG program and CMSC:

- \$30 million in additional costs is spent per year on RT-GCG program despite the Market Surveillance Panel (MSP) recommending the Independent Electricity System Operator (IESO) scale back the program.
- \$260 million in ineligible RT-GCG costs were paid out from 2006-2015 and only about half has been recovered.
- About \$1.6 billion of CMSC paid since 2002, including \$500 million to just a few market participants in the northwest; was supposed to be temporary.
- Market participants who have misused programs are allowed to participate in the market renewal working group.
- Market Assessment and Compliance Division (MACD) has limited resources and is not sufficiently independent.

Legislative Power and Authority of the Ontario Energy Board (OEB) – Ministry of Energy

In the Auditor General's report it is recommended that to ensure that ratepayers' interests are protected and that recommendations made by the OEB's Market Surveillance Panel (MSP) to improve market rules are addressed that the Ministry of Energy review the legislative power and authority of the OEB to conduct a review of a market rule on its own motion, and to consider expanding its authority under the Electricity Act, 1998, when misuse and abuse of a market rule is brought forward by the MSP and is not effectively being addressed by the Independent Electricity System Operator (IESO).

Legislative Authority Market Assessment and Compliance Division (MACD) – Ministry of Energy

In the Auditor General's report it is recommended that to enable the Independent Electricity System Operator's MACD to conduct thorough and effective investigations that the Ministry of Energy should give MACD explicit legislative authority under the Electricity Act, 1998 to compel information and evidence in the course of its investigations.

Industrial Conservation Initiative – Ministry of Energy

In the Auditor General's report it is recommended that to ensure the transparency of government decisions with respect to the Industrial Conservation Initiative (ICI) that the Ministry of Energy review the impact of the Industrial Conservation Initiative on low-energy consuming ratepayers and publicly report this information.

Cybersecurity – IESO

The Auditor's review acknowledges that the Independent Electricity System Operator (IESO) complies with regulatory standards, but suggests there are potential vulnerabilities in its practices that could leave IESO susceptible to cyber breaches, which could in turn jeopardize reliability.

The AG report includes a range of recommendations, paraphrased below, that suggest IESO should:

- Create a senior-level position dedicated to cybersecurity and establish a formal reporting process to both IESO executives and the IESO Board of Directors
- Increase the number of cybersecurity staff and engage an external IT cybersecurity vendor
- Ensure its IT department involves its cybersecurity staff in the early stages of all IT projects that could pose cybersecurity risks
- Procure technology that prevents and identifies breaches of confidential information and monitor staff access to confidential information
- Encrypt all backup tapes and store them in a secure off-site location

SCOPA Chapter 3 – Introductory Remarks

Final

Ministry of Energy

Introductory Remarks by DM Imbrogno (5 mins)

- (Introductions – to my right, to my left, also joining us)
- This afternoon we'll have the opportunity to address the 18 recommendations made by the Office of the Auditor General in chapter 3 of the latest annual report.
- Ontario's electricity system has layers of oversight designed to ensure we have an efficient, cost-effective system and a reliable supply of power.
- In particular, the Ontario Energy Board plays a vital role in ensuring that the electricity market operates in a way that is in the best interest of ratepayers.
- In distinct but interrelated ways, the Ministry and the OEB, and the Independent Electricity System Operator, are continuously looking for ways to improve our electricity system.

- Overall, I am confident that our electricity market works efficiently and serves our residential, industrial and commercial customers well.
- Today is a good opportunity for each of our organizations to speak about the mechanisms we have in place now, and some of the system improvements planned for the future.
- We welcome and appreciate the recommendations of the Auditor General and agree with the need for a high degree of oversight in the electricity market.
- In particular, we welcome the advice on the market rule review and amendment process and the enforcement of market rules, and we are committed to working collaboratively in addressing these, including reviewing the Electricity Act as needed.
- We welcome the Auditor's recommendation on the Industrial Conservation Initiative. We continue to monitor the impact of this program.

- Reducing peak demand is a significant priority of my ministry and the ICI is an essential tool in helping us achieve that. We will continue to monitor the effect of this program on all classes of electricity consumers.
- I look forward to answering your questions today. I'm now going to hand it over Rosemarie Leclair, Chair of the OEB, to offer some introductory thoughts. And after Rosemarie, Peter Gregg from IESO will also have introductory remarks. Thank you.

(remarks by OEB and IESO follow)

Ontario Energy Board

Introductory Remarks by Rosemarie Leclair (5 mins)

- Thank you (NAME). Good afternoon Chair and members of the committee. My name is Rosemarie Leclair and I am the Chair and CEO of the Ontario Energy Board.
- I would like to introduce the members of the Board who are with me today:
 - o Glenn Leslie, Chair of the Market Surveillance Panel;
 - o Mary Anne Aldred, Chief Operating Officer and General Counsel; and
 - o Martine Band. Associate General Counsel.
- We were pleased to read in the Auditor General's Report that the OEB's Market Surveillance Panel, the MSP, has been effective in monitoring and reporting inappropriate market conduct.
- Under the Electricity Restructuring Act, 2004, the Market Surveillance Panel transferred from the Independent Electricity System Operator, or IESO, to the Ontario Energy Board, effective January 1, 2005. The MSP is responsible for monitoring the wholesale electricity markets administered by the IESO.
- The MSP has two principal functions:
- The first is regular monitoring and assessment of the IESO-administered markets: Central to the assessment function is the identification and analysis of market outcomes that fall outside predicted patterns or norms. The MSP reports the results of its monitoring and assessment activities twice annually.

- The second function is to investigate market participant conduct: The MSP has broad powers to investigate, but not punish, market participants in relation to their activities in the wholesale markets.
- The OEB posts both these reports on our website when they are completed. Copies of the reports are transmitted to the IESO and OEB staff brief the IESO Board of Directors on the report's findings. Since the Auditor General's Report was released, the OEB has written to the IESO with regard to the IESO's near-term plan to implement the recommendations of the MSP (need to check).
- As stated in our response to the Fall Report, the OEB will continue to exercise its existing authority in an independent manner and with due regard to the criteria for assessing market rule amendments as set out in the Electricity Act, 1998.
- We thank the Committee for inviting us to attend and are happy to answer any questions the Committee may have.

Independent Electricity System Operator

Introductory Remarks by Peter Gregg (10 mins)

- Thank you. I want to begin by thanking the committee for inviting the IESO to be here today to discuss the 2017 Auditor-General's report, as well as the Auditor-General and her staff for their recommendations and their cooperation throughout the development of the report.
- I am here today with:
 - o Leonard Kula, Vice-President of Planning, Acquisition, and Operations;
 - o Sorana Ionescu, Acting Vice-President of Information and Technology Services;
 - o Glenn McDonald, Director of our Market Assessment and Compliance Division.
- I want to say a quick word about the IESO's mandate, and then I'll focus on some of the topics discussed in the Auditor-General's report, specifically our role with respect to market oversight and cybersecurity.
- The IESO works at the heart of Ontario's electricity system and has a broad mandate that includes:
 - o planning to meet Ontario's electricity needs in the near and long term;
 - o operating the provincial electricity grid;
 - o administering the electricity market;
 - o fostering a culture of conservation; and
 - o engaging with stakeholders and communities across the province.

- We also have a key role informing and implementing policy, and creating opportunities that enable innovation in the sector.
- Most of what we do is informed by stakeholder input. In fact, creating processes for stakeholders to provide input is a legislative requirement of ours. A set of principles guides our engagements, ensuring that they are open, transparent, inclusive and have adequate representation of the public. The final decision always lies with the IESO, but creating processes to receive public feedback indiscriminately is a key principle of ours.
- Stakeholder input has significantly improved the quality of our work, particularly guiding process and market design changes. Similar to other market operators in North America, engaging with the market participants who collectively keep the system running is critical, and that's part of why stakeholder engagement is part of our DNA.
- When it comes to administering Ontario's electricity market, the IESO's Market Assessment and Compliance Division, a ring-fenced business unit, monitors its operation, fostering compliance with the province's market rules and North American reliability standards. Its enforcement authorities also include the ability to audit certain market programs and adjust payments from the program, similar to Canada Revenue Agency tax audits.
- The IESO agrees with the Auditor General's recommendation that a review of sufficiency of enforcement resourcing be conducted, as it is consistent with recent increases in staff at MACD and the process of ongoing review of priorities. Attracting staff with expertise in market rules and investigations continues to be a priority.
- All of these efforts would be for nothing if we weren't able to ensure Ontarians have power when they need it... and that is why

maintaining the reliability of Ontario's electricity system is at the core of what the IESO does.

- The Auditor General's 2017 report focuses on two market functions that are critical to accomplishing this task: the Real-Time Generator Cost Guarantee program and Congestion Management Settlement Credits.
- Without these programs, the reliability of Ontario's electricity system would be reduced and North American power system reliability standards would not be met—these standards were put in place following the 2003 blackout and are mandatory in Ontario.
- The IESO's Market Assessment and Compliance Division and the Ontario Energy Board's Market Surveillance Panel have identified inefficiencies with these programs and the IESO has taken action to address them.
- Enhancements to the Real-Time Generator Cost Guarantee program include pre-defined costs and stricter rules that have increased transparency and efficiency. Annual program costs were \$22 million in 2017, down significantly from \$61 million in 2014. Costs claimed under the previous version of the program that could have been found to be ineligible were identified and the majority were recovered, and one generator responsible for two-thirds of the costs was fined an additional \$10 million.
- Regarding Congestion Management Settlement Credits, the IESO has updated more than a dozen market rules to make it more efficient. As the MSP noted in a December 2016 report, "Many of the most problematic issues associated with the CMSC regime have been brought to an end – in large measure as a result of the Panel having identified these situations, and the IESO having acted to eliminate them."

- In some instances, our assessments have found that implementing changes recommended by the Market Surveillance Panel would compromise the reliability of Ontario's electricity system. This speaks to the different mandates of the MSP and IESO. The MSP looks at our electricity system from a market efficiency standpoint, while the IESO must consider a broader range of factors, most importantly impacts on reliability.
- Ontario is in a stable supply situation as a result of investments made over the last decade, making now the right time to make more fundamental changes to the electricity market. These changes are being made through the IESO's Market Renewal Program, which will result in a more efficient, competitive and transparent electricity market.
- It is through the electricity market that we accept offers and bids for energy and schedule the lowest-cost resources needed to meet the province's electricity needs. In this way the market provides the most efficient outcomes, as it does in other jurisdictions, and it is through the market that we maintain a reliable system.
- Market Renewal is estimated to result in up to \$5.2 billion in savings over 10 years, the majority of which will be realized by ratepayers. This will include replacing the RealTime Generator Cost Guarantee program with a more efficient and transparent mechanism and eliminating Congestion Management Settlement Credits. The OEB's Market Surveillance Panel is supportive and is participating in the market renewal initiative.
- On cybersecurity, the Auditor General acknowledges that the IESO is adhering to North American standards but suggests that further enhancements could be made.

- Cybersecurity remains at the core of the IESO's role in maintaining the safe and reliable operation of Ontario's power grid and a reliable supply of electricity for Ontarians, and we take this job very seriously.
- For us, ensuring effective cybersecurity management comes down to three main things:
 - o 1. Continuously strengthening our organization's security posture
 - o 2. Ensuring compliance while driving innovation, and
 - o 3. Establishing strategic partnerships to innovate cyber defense
- We have recently hired a new Chief Information Officer (or "we are in the final stages of selecting a new CIO"). The IESO's CIO will continue to drive our enterprise-wide cybersecurity management program and ensure that cybersecurity risk management continues to be addressed, enhanced and integrated across all levels of the organization.
- To support our in-house team of cybersecurity specialists, the IESO is establishing a robust security operations centre to provide 24/7 real-time cybersecurity monitoring to assist with incident detection and response.
- Beyond the ongoing technical improvements the IESO is implementing to maintain and strengthen its cybersecurity posture, we remain committed to playing a leadership role in the electricity sector by supporting innovation and capacity building in the field of cyber threat management. We bring together sector counterparts as well as the world's leading cybersecurity policy experts to share best practices in addressing existing and emerging cybersecurity issues to improve cybersecurity within Ontario's electricity sector.

- As we've seen recently, the federal government has committed to significant investments in cyber threat management. The IESO is working with the Communications Security Establishment (CSE), Canada's cryptographic agency. Together we are exploring integrated information and data sharing in defending cyberattacks and working on ways to proactively address mutual cyber issues.
- In closing, the IESO supports the Market Surveillance Panel's work and acknowledges the recommendation made by the Auditor General. I look forward to answering any questions you have today.

SCOPA Chapter 3 – Introductory Remarks

Final

Ministry of Energy

Introductory Remarks by DM Imbrogno (5 mins)

- Good afternoon, my name is Serge Imbrogno I am the Deputy Minister of Energy. Joining me today are Rosemarie Leclair, Chair and Chief Executive Officer of the Ontario Energy Board and Peter Gregg, President and Chief Executive Officer of the Independent Electricity System Operator.
- This afternoon we'll have the opportunity to address the 18 recommendations made by the Office of the Auditor General in chapter 3 of the latest annual report.
- Ontario's electricity system has layers of oversight designed to ensure we have an efficient, cost-effective system and a reliable supply of power.
- In particular, the Ontario Energy Board plays a vital role in ensuring that the electricity market operates in a way that is in the best interest of ratepayers.

- In distinct but interrelated ways, the Ministry and the OEB, and the Independent Electricity System Operator, are continuously looking for ways to improve our electricity system.
- Overall, I am confident that our electricity market works efficiently and serves our residential, industrial and commercial customers well.
- Today is a good opportunity for each of our organizations to speak about the mechanisms we have in place now, and some of the system improvements planned for the future.
- We welcome and appreciate the recommendations of the Auditor General and agree with the need for a high degree of oversight in the electricity market.
- In particular, we welcome the advice on the market rule review and amendment process and the enforcement of market rules, and we are committed to working collaboratively in addressing these, including reviewing the Electricity Act as needed.
- We welcome the Auditor's recommendation on the Industrial Conservation Initiative. We continue to monitor the impact of this program.

- Reducing peak demand is a significant priority of my ministry and the ICI is an essential tool in helping us achieve that. We will continue to monitor the effect of this program on all classes of electricity consumers.
- I look forward to answering your questions today. I'm now going to hand it over Rosemarie Leclair, Chair and CEO of the OEB, to offer some introductory thoughts. And after Rosemarie, Peter Gregg, President and CEO of the IESO will also have introductory remarks. Thank you.

(remarks by OEB and IESO follow)

Ontario Energy Board

Introductory Remarks by Rosemarie Leclair (5 mins)

- Thank you (NAME). Good afternoon Chair and members of the committee. My name is Rosemarie Leclair and I am the Chair and CEO of the Ontario Energy Board.
- I would like to introduce the members of the Board who are with me today:
 - o Glenn Leslie, Chair of the Market Surveillance Panel;
 - o Mary Anne Aldred, Chief Operating Officer and General Counsel; and
 - o Martine Band. Associate General Counsel.
- We were pleased to read in the Auditor General's Report that the OEB's Market Surveillance Panel, the MSP, has been effective in monitoring and reporting inappropriate market conduct.
- Under the Electricity Restructuring Act, 2004, the Market Surveillance Panel transferred from the Independent Electricity System Operator, or IESO, to the Ontario Energy Board, effective January 1, 2005. The MSP is responsible for monitoring the wholesale electricity markets administered by the IESO.
- The MSP has two principal functions:
- The first is regular monitoring and assessment of the IESO-administered markets: Central to the assessment function is the identification and analysis of market outcomes that fall outside predicted patterns or norms. The MSP reports the results of its monitoring and assessment activities twice annually.

- The second function is to investigate market participant conduct: The MSP has broad powers to investigate, but not punish, market participants in relation to their activities in the wholesale markets.
- The OEB posts both these reports on our website when they are completed. Copies of the reports are transmitted to the IESO and OEB staff brief the IESO Board of Directors on the report's findings. Since the Auditor General's Report was released, the OEB has written to the IESO with regard to the IESO's near-term plan to implement the recommendations of the MSP (need to check).
- As stated in our response to the Fall Report, the OEB will continue to exercise its existing authority in an independent manner and with due regard to the criteria for assessing market rule amendments as set out in the Electricity Act, 1998.
- We thank the Committee for inviting us to attend and are happy to answer any questions the Committee may have.

Independent Electricity System Operator

Introductory Remarks by Peter Gregg (10 mins)

- Thank you. I want to begin by thanking the committee for inviting the IESO to be here today to discuss the 2017 Auditor-General's report, as well as the Auditor-General and her staff for their recommendations and their cooperation throughout the development of the report.
- I am here today with:
 - o Leonard Kula, Vice-President of Planning, Acquisition, and Operations;
 - o Sorana Ionescu, Acting Vice-President of Information and Technology Services;
 - o Glenn McDonald, Director of our Market Assessment and Compliance Division.
- I want to say a quick word about the IESO's mandate, and then I'll focus on some of the topics discussed in the Auditor-General's report, specifically our role with respect to market oversight and cybersecurity.
- The IESO works at the heart of Ontario's electricity system and has a broad mandate that includes:
 - o planning to meet Ontario's electricity needs in the near and long term;
 - o operating the provincial electricity grid;
 - o administering the electricity market;
 - o fostering a culture of conservation; and
 - o engaging with stakeholders and communities across the province.

- We also have a key role informing and implementing policy, and creating opportunities that enable innovation in the sector.
- Most of what we do is informed by stakeholder input. In fact, creating processes for stakeholders to provide input is a legislative requirement of ours. A set of principles guides our engagements, ensuring that they are open, transparent, inclusive and have adequate representation of the public. The final decision always lies with the IESO, but creating processes to receive public feedback indiscriminately is a key principle of ours.
- Stakeholder input has significantly improved the quality of our work, particularly guiding process and market design changes. Similar to other market operators in North America, engaging with the market participants who collectively keep the system running is critical, and that's part of why stakeholder engagement is part of our DNA.
- When it comes to administering Ontario's electricity market, the IESO's Market Assessment and Compliance Division, a ring-fenced business unit, monitors its operation, fostering compliance with the province's market rules and North American reliability standards. Its enforcement authorities also include the ability to audit certain market programs and adjust payments from the program, similar to Canada Revenue Agency tax audits.
- The IESO agrees with the Auditor General's recommendation that a review of sufficiency of enforcement resourcing be conducted, as it is consistent with recent increases in staff at MACD and the process of ongoing review of priorities. Attracting staff with expertise in market rules and investigations continues to be a priority.
- All of these efforts would be for nothing if we weren't able to ensure Ontarians have power when they need it... and that is why

maintaining the reliability of Ontario's electricity system is at the core of what the IESO does.

- The Auditor General's 2017 report focuses on two market functions that are critical to accomplishing this task: the Real-Time Generator Cost Guarantee program and Congestion Management Settlement Credits.
- Without these programs, the reliability of Ontario's electricity system would be reduced and North American power system reliability standards would not be met—these standards were put in place following the 2003 blackout and are mandatory in Ontario.
- The IESO's Market Assessment and Compliance Division and the Ontario Energy Board's Market Surveillance Panel have identified inefficiencies with these programs and the IESO has taken action to address them.
- Enhancements to the Real-Time Generator Cost Guarantee program include pre-defined costs and stricter rules that have increased transparency and efficiency. Annual program costs were \$22 million in 2017, down significantly from \$61 million in 2014. Costs claimed under the previous version of the program that could have been found to be ineligible were identified and the majority were recovered, and one generator responsible for two-thirds of the costs was fined an additional \$10 million.
- Regarding Congestion Management Settlement Credits, the IESO has updated more than a dozen market rules to make it more efficient. As the MSP noted in a December 2016 report, "Many of the most problematic issues associated with the CMSC regime have been brought to an end – in large measure as a result of the Panel having identified these situations, and the IESO having acted to eliminate them."

- In some instances, our assessments have found that implementing changes recommended by the Market Surveillance Panel would compromise the reliability of Ontario's electricity system. This speaks to the different mandates of the MSP and IESO. The MSP looks at our electricity system from a market efficiency standpoint, while the IESO must consider a broader range of factors, most importantly impacts on reliability.
- Ontario is in a stable supply situation as a result of investments made over the last decade, making now the right time to make more fundamental changes to the electricity market. These changes are being made through the IESO's Market Renewal Program, which will result in a more efficient, competitive and transparent electricity market.
- It is through the electricity market that we accept offers and bids for energy and schedule the lowest-cost resources needed to meet the province's electricity needs. In this way the market provides the most efficient outcomes, as it does in other jurisdictions, and it is through the market that we maintain a reliable system.
- Market Renewal is estimated to result in up to \$5.2 billion in savings over 10 years, the majority of which will be realized by ratepayers. This will include replacing the RealTime Generator Cost Guarantee program with a more efficient and transparent mechanism and eliminating Congestion Management Settlement Credits. The OEB's Market Surveillance Panel is supportive and is participating in the market renewal initiative.
- On cybersecurity, the Auditor General acknowledges that the IESO is adhering to North American standards but suggests that further enhancements could be made.

- Cybersecurity remains at the core of the IESO's role in maintaining the safe and reliable operation of Ontario's power grid and a reliable supply of electricity for Ontarians, and we take this job very seriously.
- For us, ensuring effective cybersecurity management comes down to three main things:
 - o 1. Continuously strengthening our organization's security posture
 - o 2. Ensuring compliance while driving innovation, and
 - o 3. Establishing strategic partnerships to innovate cyber defense
- We have recently hired a new Chief Information Officer (or "we are in the final stages of selecting a new CIO"). The IESO's CIO will continue to drive our enterprise-wide cybersecurity management program and ensure that cybersecurity risk management continues to be addressed, enhanced and integrated across all levels of the organization.
- To support our in-house team of cybersecurity specialists, the IESO is establishing a robust security operations centre to provide 24/7 real-time cybersecurity monitoring to assist with incident detection and response.
- Beyond the ongoing technical improvements the IESO is implementing to maintain and strengthen its cybersecurity posture, we remain committed to playing a leadership role in the electricity sector by supporting innovation and capacity building in the field of cyber threat management. We bring together sector counterparts as well as the world's leading cybersecurity policy experts to share best practices in addressing existing and emerging cybersecurity issues to improve cybersecurity within Ontario's electricity sector.

- As we've seen recently, the federal government has committed to significant investments in cyber threat management. The IESO is working with the Communications Security Establishment (CSE), Canada's cryptographic agency. Together we are exploring integrated information and data sharing in defending cyberattacks and working on ways to proactively address mutual cyber issues.
- In closing, the IESO supports the Market Surveillance Panel's work and acknowledges the recommendation made by the Auditor General. I look forward to answering any questions you have today.

KEY MESSAGES

Contents

Role of the Secretary of the Cabinet.....	2
Government Decision-Making/Advice Provided/Personal Opinion	2
Relationship with the Office of the Auditor General	3
Pension Asset Accounting.....	4
Pension Asset Accounting	4
IESO Accounting.....	5
IESO Accounting Changes – Market Accounts	5
IESO Accounting Changes – Rate-Regulated Accounting	5
Ontario Fair Hydro Plan.....	7
OFHP Decision-Making	7
Pre-Election Report.....	8
Pre-Election Report	8
Province's Fiscal Situation.....	9
Debt	9
Preparation of Public Accounts.....	10
Future/Adverse Audit Opinions	10
External Advisors.....	11
Timeline of Finalization of Financial Statements.....	12
Other Topics.....	13
Records Disclosure.....	13
Out of Scope.....	14

ROLE OF THE SECRETARY OF THE CABINET

Topic	Government Decision-Making/Advice Provided/Personal Opinion
Key Messages	• As the head of the Ontario Public Service, it is my role to provide my best advice to the Premier to help deliver on the government's mandate. • To this end, I rely on the expertise of the province's professional staff to ensure due diligence in providing objective advice to support government decision-making. • I would add the point here that this professional advice takes a number of forms – legal, accounting, etc. • Due diligence includes completing internal analysis, building prudence into financial forecasts, looking to other jurisdictions or external advisors to supplement our own analysis, and always bringing our best professional judgment to the table. • If the public service has provided its objective advice based on this due diligence, and if the decisions made are constitutional, and the effects of the policy are accounted for transparently, then we have fulfilled our role as public servants. • As you can appreciate, as the Secretary of the Cabinet, it is not my role to provide advice based on my opinions – it is my role to provide my advice based on objective evaluation of the policy options. • I, and my colleagues in the Ontario Public Service, will continue to ensure our due diligence to support decision-making for this policy decision and any others.
Handover	• For more information on the processes surrounding specific policy decisions, I will pass it over to: - o Deputy Angus

Topic	Relationship with the Office of the Auditor General
Key Messages	• I speak for myself and my colleagues when I say that the public service has the utmost respect for all independent officers of the legislature, and we value the important and necessary perspective they bring. • Our professional staff will continue to take a proactive approach to raising issues with the Office of the Auditor General. • I know, for example, that the Office of the Provincial Controller works closely with the Office of the Auditor General to identify audit issues early and to ensure that stakeholders are engaged in discussions regarding risks and resolution. • As public servants, we will continue to ensure due diligence and provide our best, objective advice to support decision-making. In addition, we will continue to work with all officers of the legislature to keep them informed and engage constructively on considerations and approaches.
Handover	• For further details on recent collaborations with the Office of the Auditor General on the topic of the preparation of Public Accounts, I will pass it over to: - o Deputy Angus

PENSION ASSET ACCOUNTING

Topic	Pension Asset Accounting
Key Messages	• The province continues to move forward and present the province's finances fairly and accurately and in accordance with Canadian Public Sector Accounting Standards. • The province's interpretation of the accounting standards on this matter is that Public Sector Accounting Standards neither require unilateral control to record an asset, nor does it include a requirement to obtain a letter from the co-sponsor of the plan agreeing to reduce further contributions within 12 months. • Our professional staff will evaluate the need for a valuation allowance annually. • The province is open to continue to discuss the matter with the Office of the Auditor General in the hopes of resolving this matter.
Handover	• For further information regarding pension asset accounting, I will pass it over to: - o Deputy Angus

IESO ACCOUNTING

Topic	IESO Accounting Changes – Market Accounts
Key Messages	- The province consolidates the entities it controls, in accordance with Public Sector Accounting Standards (PSAS) and its internal reporting policies. - In 2016, the Independent Electricity System Operator (IESO) changed the accounting for the market accounts and recognized these balances on its financial statements. - The financial statements of ~~the~~ IESO for the year-ended December 31, 2016 were subject to an external audit and received an unqualified (or clean) opinion. - The government supports this enhanced reporting and greater transparency for the economic activities of the IESO resulting from the recognition of the market accounts. - The change to include market account assets and liabilities in the financial statements provides increased transparency with respect to the value of transactions that flow through Ontario's electricity market, that otherwise would go unreported in IESO's financial statements. - The province is open to continue to discuss the issue in the hopes of resolving this matter.
Handover	- For further details on the province's decision to accept IESO market accounts on the province's consolidated financial statements, I will pass it over to: - Deputy Angus - For further details on ~~the~~ IESO's decision to adopt market accounts, I will pass it over to: - Deputy Imbrogno
Topic	IESO Accounting Changes – Rate-Regulated Accounting

Key Messages	• The Independent Electricity System Operator (IESO) prepares its financial statements in accordance with Public Sector Accounting Standards. • The province consolidates the entities it controls, in accordance with Public Sector Accounting Standards and its internal reporting policies. • Rate-regulated accounting better reflects the economic substance of certain types of IESO expenses that may not be directly recovered through normal revenue requirement models, and instead are recovered through rate regulation. • This change is in line with accounting practices followed by six out of eight other independent system operators in North America. • The change also provides IESO financial statement users greater transparency into the substance of the variance accounts it holds and its right to collect an amount in the future. • The province is open to continue to discuss the issue in the hopes of resolving this matter.
Handover	• For further details on the province's decision to accept IESO rate-regulated accounting on the province's consolidated financial statements, I will pass it over to: - o Deputy Angus • For further details on ~~the~~ IESO's decision to adopt rate-regulated accounting, I will pass it over to: - o Deputy Imbrogno

ONTARIO FAIR HYDRO PLAN

Topic	<u>Ontario's Fair Hydro Plan (OFHP)</u> Decision-Making
Key Messages	- As public servants, it is our role to provide our best, objective advice to support government decision-making. - For this policy matter, like any other, our professional staff ensured the proper due diligence was completed in providing their advice. - In developing Ontario's Fair Hydro Plan, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure this due diligence was completed. - External advisors are generally engaged to provide advice and guidance to supplement internal analysis, and are in the normal course of business. - The proposed accounting for ~~the~~ Ontario's Fair Hydro Plan reflects the economic substance of the transaction by differentiating costs borne by taxpayers versus those borne by ratepayers. - The province will continue to prepare its consolidated financial statements in accordance with Public Sector Accounting Standards (PSAS). - The province's professional staff have appropriately applied <u>Public Sector Accounting Standards PSAS</u> guidance in assessing the accounting for ~~the~~ Ontario's Fair Hydro Plan. - The province has a strong track record of producing high-quality financial reports on a timely basis, and will continue to move forward and present the province's finances fairly, accurately and in accordance with <u>Public Sector Accounting Standards</u> ~~PSAS~~.
Handover	For further details on that due diligence, including the consideration of a range of implementation options and consultations with legal, accounting, financial, and energy sector ~~third-party expert~~ ~~experts~~, I will pass it over to:

o Deputy Imbrogno

PRE-ELECTION REPORT

Topic	Pre-Election Report
Key Messages	<i>If release is unknown:</i> • The province takes the Auditor General's recommendations seriously. • The government continues to deliberate on whether and when to release a Pre-Election report. • All officers of the legislature are being kept informed and engaged constructively on considerations and approaches to ensure the people of Ontario are provided with an independent review of the province's fiscal position in advance of the election. <i>If release is known:</i> • The government has assured us that they will provide the people of Ontario with an overview of the province's fiscal position in advance of a writ of election being issued on May 9, 2018. • To this end, the Treasury Board Secretariat, in partnership with the Ministry of Finance, is in the process of drafting the Pre-Election Report. • This report will present the province's estimated future revenue and expense, and other details of its fiscal planning processes, before the provincial election scheduled for June 7, 2018.
Handover	• For further details on the Pre-Election Report, and how the province has been working with the Office of the Auditor General, I will pass it over to:

- o Deputy Angus; and,
- o Deputy Thompson

PROVINCE'S FISCAL SITUATION

Topic	Debt
Key Messages	• The province has a strong track record of producing high-quality financial reports on a timely basis and continues to present the province's finances fairly and accurately and in accordance with Canadian Public Sector Accounting Standards. • The government is projecting a balanced budget in 2017-18. • The Ministry of Finance is committed to a responsible fiscal plan and they build prudence into our forecasts.
Handover	• For further details, I will pass it over to: - o Deputy Thompson

Commented [TA(1)]: MOF – Do you have any messaging you can add?

PREPARATION OF PUBLIC ACCOUNTS

Topic	Future/Adverse Audit Opinions
Key Messages	• It would be inappropriate for me to speculate on how the Auditor General may issue an opinion for the next Public Accounts. • What I can say is that the province has a strong track record of producing high-quality financial reports on a timely basis. • We will continue to present the province's finances fairly and accurately and in accordance with Canadian Public Sector Accounting Standards and ensure due diligence through our internal analysis, looking to other jurisdictions or external advisors to supplement our own analysis, and by always bringing our best, objective professional judgment to the table. • We will continue to work constructively with the Office of the Auditor General and, at the appropriate times, keep all independent officers of the legislature informed.
Handover	• If you would like further details on the preparation of Public Accounts and the province's work with the Office of the Auditor General, I would be happy to pass it over to: - o Deputy Angus • If you would like further details on the province's fiscal management, I would be pleased to pass it over to: - o Deputy Thompson

Topic	External Advisors
Key Messages	• We will continue to ensure appropriate due diligence is completed in all objective advice that we provide to support government decision-making. • This includes completing our own internal analysis, building prudence into financial forecasts, looking to other jurisdictions or external advisors to supplement our own analysis, and always bringing our best professional judgment to the table. This is particularly important for complex or emerging matters. • Our professional staff will continue to take a proactive approach to raising items with the Office of the Auditor General. • We remain committed to working with the Office of the Auditor General to discuss items as they arise.
Handover	• For further details on how we use external expertise to support our own internal analysis, I will pass it over to: - o Deputy Angus

Topic	Timeline of Finalization of Financial Statements
Key Messages	• The Treasury Board Secretariat and the Ministry of Finance are supportive of the timely delivery of Public Accounts. • The Office of the Provincial Controller works closely with the Office of the Auditor General to identify audit issues early and to ensure that stakeholders are engaged in discussions regarding risks and resolution. • Planning discussions for the 2017-18 Public Accounts have already begun between the Office of the Provincial Controller and the Office of the Auditor General. • As well, the Office of Economic Policy has been engaged in discussions on risk considerations related to economic models used to estimate personal and corporate tax revenues. • We remain committed to working constructively with the Office of the Auditor General.
Handover	• For further details, I will pass it over to: - o Deputy Angus

OTHER TOPICS

Topic	Records Disclosure
Key Messages	• As public servants, it is our role to provide our best advice and conduct our due diligence to inform government decision-making. • Part of this process includes information gathering, questioning and deliberating. • The specific record you are referring to is likely part of that discussion process, where we as public servants engage in deliberations and explore the options to formulate our best advice. • It is important to keep in mind that an individual email, or trail of emails, represents a point in time discussion. • Statements contained within them are not necessarily representative of the final advice put forward or an endorsement of what the public service has identified as the best approach. • The records must be considered in the context of broader discussion and deliberation, as an exercise in due diligence, and not necessarily as a final endorsement of any particular option or approach. • As always, we are committed to working constructively with the Office of the Auditor General so that it can provide its independent views to the Legislative Assembly.
Handover	• For further details, I will pass it over to: - o Deputy Angus

Topic	Out of Scope
Key Messages	• Thank you for your question. • I'm not sure that I can speak to the specifics of your question, but would be happy to pass it over to my colleague, Deputy _____, who may know more. • If we don't have the information with us today we will make every effort to get the Committee as much information as we can.
Handover	• For further details, I will pass it over to: - o Deputy Angus - o Deputy Imbrogno - o Deputy Thompson

QUESTIONS & ANSWERS

Contents

Pension Asset Accounting	2
AG Recommendation #1: Pension Asset Accounting	2
Advisory Panel Compensation	2
IESO Accounting	3
AG Recommendation #2: IESO Market Accounts	3
AG Recommendation #5: IESO Market Accounts & Rate-Regulated Accounting	4
AG Audit of 2017 Statements	4
Ontario's Fair Hydro Plan	7
AG Recommendation #3: OFHP Accounting	7
AG Recommendation #6: "Legislated Accounting"	11
AG Recommendation #9: Arm's Length Trusts	13
Records Disclosure/Process	14
Re-Design of Hydro Bills	15
Pre-Election Report	15
AG Recommendation #10: Pre-Election Report on Ontario's Finances	15
Province's Fiscal Situation	16
Recommendation #7: Province's Debt Burden	16
Financial Accountability Office Reports	16
Credit Ratings	16
Preparation of Public Accounts	17
AG Recommendation # 4: External Advisors	17
AG Recommendation #8: Timeline of Finalization of Financial Statements	17
Audit Opinion	17
Other	Error! Bookmark not defined.

PENSION ASSET ACCOUNTING

AG Recommendation #1: Pension Asset Accounting

For QAs related to:	See:
Pension Asset Accounting	Treasury Board Secretariat

Advisory Panel Compensation

For QAs related to:	See:
Pension Asset Accounting	Treasury Board Secretariat

IESO ACCOUNTING**Commented [HS(1)]:** IESO to review and fact check

Add additional Q/As as IESO thinks is necessary

AG Recommendation #2: IESO Market Accounts

- IESO's accounting changes are supported by the IESO's audit committee, board of directors, its independent external auditor, and by the Office of the Provincial Controller.
- The IESO prepares its financial statements in accordance with PSAS, and received an unqualified, or clean, audit opinion on its 2016 financial statements.
- The change to include market account assets and liabilities in the financial statements provides increased transparency with respect to the value of transactions that flow through Ontario's electricity market.
- The government supports the enhanced reporting and greater transparency for the economic activities of IESO resulting from the recognition of the market accounts.

For QAs related to:	See:
Government decision to accept IESO market accounts	Treasury Board Secretariat

Q. Why did the IESO choose to recognize market accounts?

The Independent Electricity System Operator (IESO) began recognizing its market accounts' assets (amounts due from power distributors) and liabilities (amounts due to power producers) in their financial results. The IESO has chosen to recognize these markets accounts on its books for transparency reasons, as it better reflects its net financial position on behalf of IESO-administered markets at year-end.

This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in the IESO's annual report which was published online in March 2017.

Further, this accounting is consistent with the presentation used previously by the Ontario Power Authority (which was merged with IESO on January 1, 2015) in its financial statements, which was not subject to qualification from the Office of the Auditor General at that time.

This change has no impact to the province's annual deficit, net debt or accumulated deficit.

This accounting change has been supported by the professional accounting staff of the Office of the Provincial Controller.

We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.

AG Recommendation #5: IESO Market Accounts & Rate-Regulated Accounting

- The IESO management, IESO's Audit Committee, IESO's Board of Directors, IESO's external auditor and the Office of the Provincial Controller all support the use of rate-regulated accounting by IESO.
- In the development of OFHP, the government consulted with several third party advisors in the application of accounting standards. This is normal course of business governments take for complex transactions.

For QAs related to:	See:
Government decision to accept IESO market accounts & rate-regulated accounting	Treasury Board Secretariat

Q. Why did the IESO choose to adopt rate-regulated accounting?

The IESO made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model.

The IESO, like Hydro One and Ontario Power Generation (OPG), is regulated by the Ontario Energy Board. The IESO adopted rate-regulated accounting for its year ended December 31, 2016. The impact on the financial statements of the Province is a decrease of \$82 million in the 2016-17 opening accumulated deficit and an increase in the 2016-17 annual deficit by \$24 million.

This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in IESO's annual report which was published online in March 2017.

AG Audit of 2017 Statements

- We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.
- The Ministry of Energy, the Ministry of Finance, and the Treasury Board Secretariat remain committed to assisting the Office of the Auditor General so that it can provide its independent views to the Legislative Assembly.

- With regards to the Auditor General's report on Ontario's Fair Hydro Plan (OFHP) – while the government does not agree with the assertions and conclusions expressed in the report, the government thanks the Office of the Auditor General for its report.
- While we expect professional accountants to agree on the vast majority of issues, we acknowledge that they may not agree on everything and when that occurs, and the difference is material to the financial statements, the Office of the Auditor General can choose to issue a qualified audit opinion.
- The Province will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.

For QAs related to:	See:
Relationship with Auditor General	Treasury Board Secretariat

Q. How will IESO respond to the Auditor General's decision to audit the 2017 consolidated financial statements?

We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.

The Ministry of Energy, the Ministry of Finance, and the Treasury Board Secretariat remain committed to assisting the Office of the Auditor General so that it can provide its independent views to the Legislative Assembly.

Q. The Auditor General says that the Independent Electricity System Operator's decision to adopt rate-regulated accounting was a deviation from Public Sector Accounting Standards, and cautioned against its use in her Independent Auditor's Report. Why this change was made and was it appropriate?

Canadian Public Sector Accounting Standards (PSAS) are effectively silent on this issue – they neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.

In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards.

Paragraph 11 of the *Introduction to Public Sector Accounting Standards* ("Introduction") states: "When applying the CPA Canadian Public Sector Accounting (PSA) Handbook, where the standards are silent on an issue, public sector entities should apply Generally Accepted Accounting Principles (GAAP), Section PS 1150."

In this case, the Independent Electricity System Operator (IESO) consulted U.S. Generally Accepted Accounting Principles (GAAP), the appropriate accounting framework in North America that provides guidance on rate-regulated operations.

The IESO made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model.

The IESO, like Hydro One and Ontario Power Generation (OPG), is regulated by the Ontario Energy Board (OEB). The IESO adopted rate-regulated accounting for its year ended December 31, 2016.

This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in IESO's annual report which was published online in March 2017.

It is worth noting that currently 8 out of 9 electricity system operators in North American markets employ accounting for rate-regulated assets, including IESO.

Q. The Auditor General says that the use of rate-regulated accounting is inappropriate for the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB) according to U.S. Generally Accepted Accounting Principles. How do you respond?

In commenting on the use of rate-regulated accounting and the role of the Ontario Energy Board (OEB), the Auditor General's report makes reference to a requirement under U.S. accounting standards in connection with the use of rate-regulated accounting that "there must an independent regulator." This reference is misleading as it does not provide the criteria in its entirety, which is as follows:

"The entity's rates for regulated services or products provided to its customers are established by or are subject to approval by an independent, third-party regulator or by its own governing board empowered by statute or contract to establish rates that bind customers" [ASC 980-10-15-2].

The U.S. accounting standard was developed specifically to not preclude the application of rate-regulated accounting by government utilities where the rate regulator would not necessarily be viewed as independent (FAS 71, par. 64).

In addition, the position that rate-regulated accounting is precluded because the OEB is not considered independent of the government of Ontario is contradictory to accepting the use of rate-regulated accounting by Ontario Power Generation (OPG) and Hydro One – both of which are regulated by the OEB and whose results, using rate-regulated accounting, are and have been included in the consolidated financial statements of the Province.

IESO Response:

Canadian Public Sector Accounting Standards (PSAS) are effectively silent on this issue – they neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.

In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards.

In this case, the Independent Electricity System Operator (IESO) consulted U.S. Generally Accepted Accounting Principles (GAAP), the appropriate accounting framework in North America that provides guidance on rate-regulated operations.

ONTARIO'S FAIR HYDRO PLAN

Commented [HS(2)]: Ministry of Energy to provide Q&As related to the policy rationale for OFHP

AG Recommendation #3: OFHP Accounting

- The province will continue to prepare its consolidated financial statements in accordance with Public Sector Accounting Standards (PSAS).
- The proposed accounting for the Ontario Fair Hydro Plan (OFHP) reflects the economic substance of the transaction by differentiating costs borne by taxpayers versus those borne by ratepayers.
- PSAS is silent on a key accounting issue regarding the OFHP – the standards neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.
- In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards.
- The professional staff has appropriately applied this guidance in assessing the accounting for the Ontario Fair Hydro Plan.

For QAs related to:	See:
Decision to accept OFHP accounting	Treasury Board Secretariat

Q. Why did the government introduce the Ontario Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent on average

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? How much is the program expected to cost?

Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.

Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately \$20 billion³. The preliminary estimate from March 2017 was about \$28 billion⁴.

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

If pressed on the details of the revised peak debt number:

³ Ministry of Energy

⁴ Ministry of Energy, submission to Financial Accountability Officer

Peak debt for OFHP has been revised down substantially from March 2017, from about \$28 billion⁵ to approximately \$20 billion⁶. These estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Would it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).

OPG currently manages approximately \$20 billion⁷ in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors⁸, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than \$2 billion⁹ and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

⁵ Ministry of Energy

⁶ Ministry of Energy

⁷ Ontario Financing Authority

⁸ Ontario Power Generation

⁹ Ontario Power Generation

Q. The Auditor General and the Financial Accountability Office both suggest that the cost of borrowing will be more expensive than traditional government borrowing? Is this true?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

Ontario Power Generation (OPG) was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

With respect to the \$4 billion¹⁰ figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately \$20 billion¹¹. The preliminary estimate from March 2017 was about \$28 billion¹².

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

¹⁰ Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

¹¹ Ministry of Energy

¹² Ministry of Energy, submission to Financial Accountability Officer

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about \$ 28 billion¹³ to approximately \$20 billion¹⁴. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from \$25 billion¹⁵ to less than \$19 billion¹⁶.

Q. Some say you are unfairly placing the burden of debt on future generations through things like Ontario's Fair Hydro Plan, how do you respond?

Future generations will be paying their fair share for a system they will be benefiting from in their lifetime. Not only will they benefit from a reliable electricity system, but also from cleaner air resulting from the elimination of coal-fired generation.

Ontario's Fair Hydro Plan (OFHP) acts much like taking out a new mortgage – providing much-needed relief now by spreading costs across the life of our assets. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

¹³ Ministry of Energy

¹⁴ Ministry of Energy

¹⁵ Ministry of Energy

¹⁶ Ministry of Energy

For example, IESO's Market Renewal initiative will result in a more efficient marketplace with competitive and transparent mechanisms that meet future system needs at the lowest cost. The initiative is expected to save up to \$5.2 billion¹⁷ over a 10-year period and forms a key component of Ontario's plan to ensure the affordability of electricity in the longer term.

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

AG Recommendation #6: "Legislated Accounting"

- The *Ontario Fair Hydro Plan Act, 2017* and its related regulations do not create accounting rules or legislate the accounting.
- It is important to distinguish legislating the accounting from legislating the right of the government to recover amounts from specified ratepayers in the future, which in the absence of legislation, would have been collected from specified ratepayers as the costs were incurred.
- The province, as always, will prepare its consolidated financial statements in accordance with PSAS, including the transactions resulting from Ontario's Fair Hydro Plan.

For QAs related to:	See:
Issue of OFHP "legislated" accounting	Treasury Board Secretariat

AG Recommendation #9: Arm's Length Trusts

- A Trust structure was selected to implement the Affordability Fund in order to provide an effective solution to distributing funds to electricity distributors. With approximately 70 distributors across Ontario, it was not feasible for the Province to enter into agreements with each distributor.

Commented [HS(3)]: CRED to provide Q&As with respect to the Affordability Fund

¹⁷ Independent Electricity System Operator, *Assessment of the Benefits of Market Renewal* (Brattle Group)

- The Trust structure establishes an independent entity with expertise from the electricity distributor and community sectors.
- There are report-back requirements on the use of funds transferred as well as the ability for the government to conduct an audit to gain assurance that the funds have been used for the purposes intended.
- The government will continue to assess the most appropriate vehicle for meeting its policy objectives, which include appropriate oversight of how transfer payments are spent.

For QAs related to:	See:
Accounting for Trust	Treasury Board Secretariat

Records Disclosure/Process

Commented [HS(4)]: LSB should review and fact check

- The Ministry conducted a search consistent with the 40 plus search terms provided by the Auditor General.
- The Ministry of Energy has selected McCarthys/Wortzmans to assist with processing and analysis of approximately 2.2 million records that resulted from the search of 81 custodians.
- The Ministry has been regularly providing the Auditor General batches of responsive documents.

For QAs related to:	See:
Records - TBS	Treasury Board Secretariat
Records - MOF	

Q. Why has the Ministry of Energy not provided all e-mails requested by the Auditor General?

As of October 13, 2017, the Ministry has provided 13,212 emails and attachments to the OAG's office.

Q. How much money did the Ministry spend on lawyers?

The Ministry does not intend to spend more than \$60,000 on this request. Although the retainer agreement includes a cap of up to \$500,000, as of September 21, 2017, only \$41,775.75 has actually been spent.

Q. What was the Ministry of Energy's process for providing the emails requested by the Auditor General?

The Ministry conducted a search consistent with the 40 plus search terms provided to the AG. In order to manage the approximately 2.2 million records resulted from the search of 81 custodians, the Ministry of Energy has selected McCarthys/Wortzmans to assist with processing and analysis of the documents.

No legal advice on relevancy of documents was provided by Wortzmans. The Ministry has been regularly providing AG batches of responsive documents.

Commented [HA(5)]: May be updated in tech briefing QA

Re-Design of Hydro Bills

Commented [HS(6)]: SNAP to provide Q&As with respect to this section

- The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills.
- Comparisons between redesigned and previous bills will continue to be possible.
- Electricity bills are a customer's main window into the electricity system. Through the LTEP consultation process, the government heard that customers found their bills confusing and inaccessible.
- Hydro One has been a leader in consumer research on ways to improve the appearance and comprehension of its bill. Hydro One enlisted the services of a behavioural research firm and engaged with thousands of customers to develop a new bill design which has been observed to increase customer satisfaction and comprehension.
- Building on this research, the Ministry launched the Bill Redesign Action Plan with the aim of revising the regulatory framework on invoicing to improve the value of electricity bills for consumers. The Ministry has engaged with industry and consumers to better understand consumer concerns and preferences with respect to the bill to ensure that any proposed changes to the bill's design will meet consumer's needs.

PRE-ELECTION REPORT

AG Recommendation #10: Pre-Election Report on Ontario's Finances

For QAs related to:	See:
Pre-Election Report on Ontario's Finances	Treasury Board Secretariat Ministry of Finance

PROVINCE'S FISCAL SITUATION**Recommendation #7: Province's Debt Burden**

For QAs related to:	See:
Ontario's Debt Burden	Ministry of Finance

Financial Accountability Office Reports

For QAs related to:	See:
FAO Reports	Ministry of Finance

Credit Ratings

For QAs related to:	See:
Credit Ratings	Ministry of Finance

PREPARATION OF PUBLIC ACCOUNTS**AG Recommendation # 4: External Advisors**

For QAs related to:	See:
External Advisors	Treasury Board Secretariat

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

AG Recommendation #8: Timeline of Finalization of Financial Statements

For QAs related to:	See:
Finalization of Financial Statements	Treasury Board Secretariat Ministry of Finance

Audit Opinion

For QAs related to:	See:
Audit Opinions	Treasury Board Secretariat

DRAFT

QUESTIONS & ANSWERS

Contents

Pension Asset Accounting	2
AG Recommendation #1: Pension Asset Accounting	2
Advisory Panel Compensation	2
IESO Accounting	3
AG Recommendation #2: IESO Market Accounts	3
AG Recommendation #5: IESO Market Accounts & Rate-Regulated Accounting	4
AG Audit of 2017 Statements	4
Ontario's Fair Hydro Plan	7
AG Recommendation #3: OFHP Accounting	7
AG Recommendation #6: "Legislated Accounting"	12
AG Recommendation #9: Arm's Length Trusts	17
Records Disclosure/Process	17
Re-Design of Hydro Bills	19
Pre-Election Report	21
AG Recommendation #10: Pre-Election Report on Ontario's Finances	21
Province's Fiscal Situation	22
Recommendation #7: Province's Debt Burden	22
Financial Accountability Office Reports	22
Credit Ratings	22
Preparation of Public Accounts	23
AG Recommendation # 4: External Advisors	23
AG Recommendation #8: Timeline of Finalization of Financial Statements	23
Audit Opinion	23
Other	Error! Bookmark not defined.

PENSION ASSET ACCOUNTING

AG Recommendation #1: Pension Asset Accounting

For QAs related to:	See:
Pension Asset Accounting	Treasury Board Secretariat

Advisory Panel Compensation

For QAs related to:	See:
Pension Asset Accounting	Treasury Board Secretariat

IESO ACCOUNTING

AG Recommendation #2: IESO Market Accounts

- The Independent Electricity System Operator's (IESO) accounting changes are supported by IESO's audit committee, board of directors, its independent external auditor and by the Office of the Provincial Controller.
- The IESO prepares its financial statements in accordance with Canadian Public Sector Accounting Standards (PSAS), and received an unqualified, or clean, audit opinion on its 2016 financial statements.
- The change to include market account assets and liabilities in the financial statements provides increased transparency with respect to the value of transactions that flow through Ontario's electricity market.
- The government supports the enhanced reporting and greater transparency for the economic activities of IESO resulting from the recognition of the market accounts.

For QAs related to:	See:
Government decision to accept IESO market accounts	Treasury Board Secretariat

Q. Why did the IESO choose to recognize market accounts?

The Independent Electricity System Operator (IESO) began recognizing its market accounts' assets (amounts due from power distributors) and liabilities (amounts due to power producers) in their financial results. The IESO has chosen to recognize these markets accounts on its books for transparency reasons, as it better reflects its net financial position on behalf of IESO-administered markets at year-end.

This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. It also brought IESO in line with seven of the eight other independent system operators in North America. These accounting changes were highlighted in the IESO's 2016 annual report which was published online in March 2017.

This change has no impact to the province's annual deficit, net debt or accumulated deficit.

This accounting change has been supported by the professional accounting staff of the Office of the Provincial Controller.

We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.

AG Recommendation #5: IESO Market Accounts & Rate-Regulated Accounting

- The Independent Electricity System Operator (IESO) management, IESO's Audit Committee, IESO's Board of Directors, IESO's external auditor and the Office of the Provincial Controller all support the use of rate-regulated accounting by IESO.
- In the development of Ontario's Fair Hydro Plan (OFHP), the government consulted with several third party advisors in the application of accounting standards. This is normal course of business governments take for complex transactions.

For QAs related to:	See:
Government decision to accept IESO market accounts & rate-regulated accounting	Treasury Board Secretariat

Q. Why did the IESO choose to adopt rate-regulated accounting?

The Independent Electricity System Operator (IESO) made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model and instead are recovered through rate regulation.

The IESO, like Hydro One and Ontario Power Generation (OPG), is regulated by the Ontario Energy Board (OEB).

The IESO adopted rate-regulated accounting for its year ended December 31, 2016. The impact on the financial statements of the Province is a decrease of \$82 million in the 2016-17 opening accumulated deficit and an increase in the 2016-17 annual deficit by \$24 million.

This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in IESO's annual report which was published online in March 2017.

Q. What was the financial impact of these accounting changes, on Ontario's electricity rate payers?

These changes in no way affect Independent Electricity System Operator's (IESO) costs, or have any financial impact on electricity ratepayers.

Ultimately, IESO made these changes because it will provide the users of its financial statements greater transparency into the market transactions it oversees, which amounted to \$17 billion last year, and better reflects the economic substance of IESO expenses that are recovered through rate-regulation.

AG Audit of 2017 Statements

- We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.
- The Ministry of Energy, the Ministry of Finance and the Treasury Board Secretariat remain committed to assisting the Office of the Auditor General so that it can provide its independent views to the Legislative Assembly.
- With regards to the Auditor General's report on Ontario's Fair Hydro Plan (OFHP) – while the government does not agree with the assertions and conclusions expressed in the report, the government thanks the Office of the Auditor General for its report.
- While we expect professional accountants to agree on the vast majority of issues, we acknowledge that they may not agree on everything and when that occurs, and the difference is material to the financial statements, the Office of the Auditor General can choose to issue a qualified audit opinion.

For QAs related to:	See:
Relationship with Auditor General	Treasury Board Secretariat

Q. How will IESO respond to the Auditor General's decision to audit the 2017 consolidated financial statements?

The Independent Electricity System Operator (IESO) recognizes the Auditor General's statutory role and authority to perform an audit of IESO.

The IESO is cooperating with the Office of the Auditor General to provide information, including the 2017 financial statements prepared by management, and for access to management for assistance in understanding such information.

The IESO has likewise instructed its audit partner to cooperate with the Auditor General's audit.

Q. The Auditor General says that the Independent Electricity System Operator's decision to adopt rate-regulated accounting was a deviation from Public Sector Accounting Standards, and cautioned against its use in her Independent Auditor's Report. Why was this change made and was it appropriate?

Canadian Public Sector Accounting Standards (PSAS) are effectively silent on this issue of whether or not to adopt rate-regulated accounting as the preferred accounting method – they neither explicitly permit, nor prohibit, the recognition, measurement, presentation or disclosure of rate-regulated activities.

In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards for guidance.

Paragraph 11 of the *Introduction to Public Sector Accounting Standards* (“Introduction”) states: “When applying the CPA Canadian Public Sector Accounting (PSA) Handbook, where the standards are silent on an issue, public sector entities should apply Generally Accepted Accounting Principles (GAAP), Section PS 1150.”

In this case, the Independent Electricity System Operator (IESO) consulted U.S. Generally Accepted Accounting Principles (GAAP), the appropriate accounting framework in North America that provides guidance on rate-regulated operations. The IESO made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model.

The IESO, like Hydro One and Ontario Power Generation (OPG), is regulated by the Ontario Energy Board (OEB). The IESO adopted rate-regulated accounting for its year ended December 31, 2016.

This accounting change was accepted by IESO’s independent external auditor, which issued an unqualified, or “clean,” audit opinion. These accounting changes were highlighted in IESO’s annual report which was published online in March 2017.

It is worth noting that currently 8 out of 9 electricity system operators in North American markets employ accounting for rate-regulated assets, including IESO.

Q. The Auditor General says that the use of rate-regulated accounting is inappropriate for the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB) according to U.S. Generally Accepted Accounting Principles. How do you respond?

In commenting on the use of rate-regulated accounting and the role of the Ontario Energy Board (OEB), the Auditor General’s report makes reference to a requirement under U.S. accounting standards in connection with the use of rate-regulated accounting that “there must be an independent regulator.”

This reference is misleading as it does not provide the criteria in its entirety, which is as follows:

“The entity’s rates for regulated services or products provided to its customers are established by or are subject to approval by an independent, third-party regulator or by its own governing board empowered by statute or contract to establish rates that bind customers” [ASC 980-10-15-2].

The U.S. accounting standard was developed specifically to not preclude the application of rate-regulated accounting by government utilities where the rate regulator would not necessarily be viewed as independent (FAS 71, par. 64).

In addition, the position that rate-regulated accounting is precluded because the OEB is not considered independent of the government of Ontario is contradictory to accepting the use of rate-regulated accounting by Ontario Power Generation (OPG) and Hydro One – both of which are regulated by the OEB and whose results, using rate-regulated accounting, are and have been included in the consolidated financial statements of the Province.

IESO Response

Canadian Public Sector Accounting Standards (PSAS) are effectively silent on this issue – they neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.

In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards.

In this case, IESO consulted U.S. Generally Accepted Accounting Principles (GAAP), the appropriate accounting framework in North America that provides guidance on rate-regulated operations.

ONTARIO'S FAIR HYDRO PLAN

AG Recommendation #3: OFHP Accounting

- The province will continue to prepare its consolidated financial statements in accordance with Public Sector Accounting Standards (PSAS).
- The proposed accounting for the refinancing of the Global Adjustment (GA) aspect of Ontario Fair Hydro Plan (OFHP) reflects the economic substance of the transaction by differentiating costs borne by taxpayers versus those borne by ratepayers.
- PSAS is silent on a key accounting issue regarding the OFHP – the standards neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.
- In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards for guidance.

For QAs related to:	See:
Decision to accept OFHP accounting	Treasury Board Secretariat

Q. Why did the government introduce the Ontario Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

To address the impact of our electricity system investments on consumers, ~~the following initiatives are being undertaken~~ Ontario's Fair Hydro Plan includes:

- Refinancing the Global Adjustment (GA) over a longer term period for Regulated Price Plan (RPP) eligible consumers, including families, small businesses and farms.
- Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill. Eligible consumers will receive additional funding through assistance programs including:
 - o Establishing a new Affordability Fund which will support Ontarians who are not eligible for the Home Assistance Program and who have difficulty paying their electricity bills.
 - o Broadening Rural or Remote Rate Protection (RRRP) to provide distribution charge relief for the customers of the local distribution companies (LDC's) with the highest distribution charges.
 - o Expanding the Ontario Electricity Support Program (OESP) to increase participation and provide further assistance to eligible participants.
 - o Establishing a new On-Reserve First Nations Delivery Rate.
- Improving sector efficiency and modernizing Ontario's electricity market, working in collaboration with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).
- Any rate increases over the next four years will be held to the rate of inflation.

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

Rate relief programs such as the OESP and RRRP have social value and benefit vulnerable people across Ontario and so, the province has shifted these programs from being paid for through electricity bills to being paid for through government funding.

This will reduce bills for everyone, and ensure these programs continue to serve those in need.

FirstAs well, a portion of Global Adjustment (GA) costs is being refinanced to reduce pressure on today's electricity consumers. In later years, the cost of financing will be recovered from consumers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

In developing the policy to refinance the GA, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

~~Second, the province has introduced rate relief programs and expanded existing ones.~~

~~In addition, a number of important programs such as the Ontario Electricity Support Program (OESP) and the Rural or Remote Rate Protection (RRRP) program are now funded from provincial revenues instead of by electricity consumers (i.e., from the rate-base).~~

~~The province has also launched a new Affordability Fund, enhanced the existing OESP, and is providing on-reserve First Nations with a delivery credit.~~

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a clean, reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's renewable electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that renewable generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets. This is the basis for the spreading of the costs across present and future generations of rate-payers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;

- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with internal and external legal, accounting, financial and energy sector experts, including third-party experts, to provide advice and ensure due diligence was completed.

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? How much is the program expected to cost?

Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.

Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately \$20 billion³. The preliminary estimate from March 2017 was about \$28 billion⁴.

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about \$28 billion⁵ to approximately \$20 billion⁶. These estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Would it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).

³ Ministry of Energy

⁴ Ministry of Energy, submission to Financial Accountability Officer

⁵ Ministry of Energy

⁶ Ministry of Energy

OPG currently manages approximately \$20 billion⁷ in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors⁸, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than \$2 billion⁹ and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

Q. The Auditor General and the Financial Accountability Office both suggest that the cost of borrowing will be more expensive than traditional government borrowing? Is this true?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

Ontario Power Generation (OPG) was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations. OPG has the necessary financing and commercial

⁷ Ontario Financing Authority

⁸ Ontario Power Generation

⁹ Ontario Power Generation

expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

With respect to the \$4 billion¹⁰ figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately \$20 billion¹¹. The preliminary estimate from March 2017 was about \$28 billion¹².

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about \$ 28 billion¹³ to approximately \$20 billion¹⁴. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

¹⁰ Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

¹¹ Ministry of Energy

¹² Ministry of Energy, submission to Financial Accountability Officer

¹³ Ministry of Energy

¹⁴ Ministry of Energy

If pressed on interest costs:

The government estimates of total interest cost also decreased from \$25 billion¹⁵ to less than \$19 billion¹⁶.

Q. Some say you are unfairly placing the burden of debt on future generations through things like Ontario's Fair Hydro Plan, how do you respond?

The OFHP is designed to ensure that future generations will be paying their fair share for a system they will be benefiting from in their lifetime.

Over the last decade Ontario has rebuilt our transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. Since 2003, nearly \$70 billion has been invested in the electricity system, including more than \$37 billion in electricity generation to ensure the system is clean and reliable.

To address the impact of our electricity system investments on consumers, Ontario's Fair Hydro Plan includes:

- Refinancing the Global Adjustment (GA) over a longer term period for Regulated Price Plan (RPP) eligible consumers, including families, small businesses and farms.
- Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill. Eligible consumers will receive additional funding through assistance programs including:
 - o Establishing a new Affordability Fund which will support Ontarians who are not eligible for the Home Assistance Program and who have difficulty paying their electricity bills.
 - o Broadening Rural or Remote Rate Protection (RRRP) to provide distribution charge relief for the customers of the local distribution companies (LDC's) with the highest distribution charges.
 - o Expanding the Ontario Electricity Support Program (OESP) to increase participation and provide further assistance to eligible participants.
 - o Establishing a new On-Reserve First Nations Delivery Rate.
- Improving sector efficiency and modernizing Ontario's electricity market, working in collaboration with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

¹⁵ Ministry of Energy

¹⁶ Ministry of Energy

- Any rate increases over the next four years will be held to the rate of inflation.

Rate relief programs such as the OESP and RRRP have social value and benefit vulnerable people across Ontario and so, the province has shifted these programs from being paid for through electricity bills to being paid for through government funding.

This will reduce bills for everyone, and ensure these programs continue to serve those in need.

~~First~~As well, a portion of Global Adjustment (GA) costs is being refinanced to reduce pressure on today's electricity consumers. In later years, the cost of financing will be recovered from consumers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

~~Second, the province has introduced rate relief programs and expanded existing ones.~~

~~In addition, a number of important programs such as the Ontario Electricity Support Program (OESP) and the Rural or Remote Rate Protection (RRRP) program are now funded from provincial revenues instead of by electricity consumers (i.e., from the rate-base).~~

~~The province has also launched a new Affordability Fund, enhanced the existing OESP, and is providing on-reserve First Nations with a delivery credit.~~

Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

For example, IESO's Market Renewal initiative will result in a more efficient marketplace with competitive and transparent mechanisms that meet future system needs at the lowest cost. The initiative is expected to save up to \$5.2 billion¹⁷ over a 10-year period and forms a key component of Ontario's plan to ensure the affordability of electricity in the longer term.

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

AG Recommendation #6: "Legislated Accounting"

- The *Ontario Fair Hydro Plan Act, 2017* and its related regulations do not create accounting rules or legislate the accounting.
- It is important to distinguish legislating the accounting from legislating the right of the government to recover amounts from specified ratepayers in the future, which in the absence of legislation, would have been collected from specified ratepayers as the costs were incurred.

¹⁷ Independent Electricity System Operator, *Assessment of the Benefits of Market Renewal* (Brattle Group)

- The province, as always, will prepare its consolidated financial statements in accordance with PSAS, including the transactions resulting from Ontario's Fair Hydro Plan.

For QAs related to:	See:
Issue of OFHP "legislated" accounting	Treasury Board Secretariat

AG Recommendation #9: Arm's Length Trusts

- A Trust structure was selected to implement the Affordability Fund in order to provide an effective solution to distributing funds to electricity distributors. With approximately 65 distributors across Ontario, it was not feasible for the Province to enter into agreements with each distributor.
- The Trust structure establishes an independent entity with expertise from the electricity distributor and community sectors.
- There are report-back requirements on the use of funds transferred as well as the ability for the government to conduct an audit to gain assurance that the funds have been used for the purposes intended.
- The government will continue to assess the most appropriate vehicle for meeting its policy objectives, which include appropriate oversight of how transfer payments are spent.

For QAs related to:	See:
Accounting for Trust	Treasury Board Secretariat

Q. Why is there a need for an Affordability Fund?

From 2015 to early 2017, electricity distributors and other stakeholders indicated to the government that there was an immediate need to help customers struggling with their electricity bills, such as those in bill arrears and facing service disconnection.

Electricity distributors reported to the Ontario Energy Board (OEB) that around 56,500 customers were disconnected in 2015 and over 58,000 customers were disconnected in 2016. Electricity distributors also reported about 400,000 residential electricity accounts in arrears in 2016.

In January 2017, Hydro One submitted to the Ministry a report, "Addressing Affordability" which outlined a number of recommendations on electricity rate mitigation, including a recommendation to establish an Affordability Fund to assist struggling customers who do not qualify for low-income conservation programs.

Q. Who is eligible to benefit through the Affordability Fund and what measures will the average household receive?

Affordability Fund was established to provide energy efficiency measures to help those Ontarians not eligible for the Save on Energy Home Assistance Program, and who need support to improve the energy efficiency of their homes.

There are three levels of support available. The level each home qualifies for depends on net household income and average electricity bill. Measures offered may vary by participating electricity distributors:

- Level 1: households receive a Home Energy Kit with energy-saving products they can install themselves (e.g. LEDs, power bars, hot water pipe insulation).
- Level 2: Households may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include ENERGY STAR appliances (e.g. efficient air conditioners, refrigerators, and dehumidifiers).
- Level 3: For electrically-heated homes only, households that qualify for this level may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include insulation and/or an ENERGYSTAR heat pump.

Q. How many households are expected to benefit from the Affordability Fund?

Number of households that the \$100 million investment in the Affordability Fund will support will depend on the types of measures installed per household. Customers may be eligible to receive varying levels of support based on their total household income and average electricity bill.

As of January 12, 2018, 2,522 applications had been received by the Affordability Fund Trust, of which 1,794 have been delivered to 47 active LDCs. Eligible customers are expected to start receiving benefits through the Affordability Fund in early 2018. **Note:** Numbers are not static and should be updated (closer to Public Accounts) as they become available.

Records Disclosure/Process

- The Ministry conducted a search consistent with the 40 plus search terms provided by the Auditor General.
- The Ministry of Energy has selected McCarthys/Wortzmans to assist with processing and analysis of approximately 2.2 million records that resulted from the search of 81 custodians.
- The Ministry has been regularly providing the Auditor General batches of responsive documents.

For QAs related to:	See:

Records - TBS	Treasury Board Secretariat
Records - MOF	

Q. Why has the Ministry of Energy not provided all e-mails requested by the Auditor General?

As of October 26, 2017, the Ministry has provided all responsive records (more than 73,000 emails) to the AG.

Q. How much money did the Ministry spend on lawyers?

Although the retainer agreement includes a cap of up to \$500,000, the Ministry of Energy spent approximately \$150,000 on the retainer.

Q. What was the Ministry of Energy's process for providing the emails requested by the Auditor General?

The Ministry conducted a search consistent with the 40 plus search terms provided to the AG. In order to manage the approximately 2.2 million records resulted from the search of 81 custodians, the Ministry of Energy selected McCarthys/Wortzmans to assist with processing and analysis of the documents.

No legal advice on relevancy of documents was provided by Wortzmans. The Ministry completed its response to the AG on October 26, 2017.

Re-Design of Hydro Bills

- The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills.
- Comparisons of costs from previous billing periods will continue to be possible.
- Electricity bills are a customer's main window into the electricity system. Through the LTEP consultation process, the government heard that customers found their bills confusing and inaccessible.
- Hydro One has been a leader in consumer research on ways to improve the appearance and comprehension of its bill. Hydro One enlisted the services of a behavioural research firm and engaged with thousands of customers to develop a new bill design which has been observed to increase customer satisfaction and comprehension.
- Building on this research, the Ministry launched the Bill Redesign Action Plan with the aim of revising the regulatory framework on invoicing to improve the value of electricity bills for consumers. The Ministry continues to engage with industry and consumers to better understand consumer concerns and

preferences with respect to the bill to ensure that any proposed changes to the bill's design will meet consumer's needs.

For QAs related to:	See:
N/A	N/A

Q. Isn't the problem the amount on people's bills, not the design?

The government recognizes that the much-needed investments in our electricity system have led to higher electricity prices. That's why the government developed Ontario's Fair Hydro Plan (OFHP) – to relieve the cost pressures caused by these system improvements.

Through the 2017 Long Term Energy Plan (2017 LTEP) consultation process, the government heard that consumers find their current bills confusing and inaccessible, as part of 2017 LTEP, the Ministry committed to continue to work with the Ontario Energy Board (OEB), industry and consumers to explore opportunities to redesign electricity bills to make them easier for customers to understand.

Q. How can Ontarian's know redesigning bills isn't just a way to hide increases?

The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills. Comparisons of costs from previous billing periods will continue to be possible.

Q. What Is the overall cost of the bill redesign?

Each LDC will have different costs to implement a re-designed bill depending on current billing and customer information systems. Changes to billing systems are a part of an LDC's cost of doing business.

Q. Are all customers in Ontario getting redesigned bills, or just in some areas?

All LDCs will be required to comply with any new requirements implemented as part of a bill-redesign initiative. By March 31, 2018, all LDCs will come into compliance with the new requirement to provide customer-specific OFHP savings on invoices.

Q How do the new regulatory amendments to require that LDCs provide customer-specific savings associated with Ontario's Fair Hydro Plan on invoices fit in to the broader redesign action plan?

The requirement for dynamic messaging or customer-specific Fair Hydro savings on invoices is the first step in the broader, longer term bill re-design project. Providing customer specific savings promotes greater understanding of the associated bill impacts of Ontario's Fair Hydro Plan (OFHP) for consumers.

The new regulatory amendments are being discussed with industry stakeholders as part of the bill redesign working group.

The Ministry of Energy is continuing to work with stakeholders to examine opportunities to redesign electricity bills to make them more understandable and to give consumers the information that they want on the bill.

PRE-ELECTION REPORT

AG Recommendation #10: Pre-Election Report on Ontario's Finances

For QAs related to:	See:
Pre-Election Report on Ontario's Finances	Treasury Board Secretariat Ministry of Finance

PROVINCE'S FISCAL SITUATION**Recommendation #7: Province's Debt Burden**

For QAs related to:	See:
Ontario's Debt Burden	Ministry of Finance

Financial Accountability Office Reports

For QAs related to:	See:
FAO Reports	Ministry of Finance

Credit Ratings

For QAs related to:	See:
Credit Ratings	Ministry of Finance

PREPARATION OF PUBLIC ACCOUNTS**AG Recommendation # 4: External Advisors**

For QAs related to:	See:
External Advisors	Treasury Board Secretariat

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

AG Recommendation #8: Timeline of Finalization of Financial Statements

For QAs related to:	See:
Finalization of Financial Statements	Treasury Board Secretariat Ministry of Finance

Audit Opinion

For QAs related to:	See:
Audit Opinions	Treasury Board Secretariat

DRAFT

QUESTIONS & ANSWERS

Contents

Pension Asset Accounting	2
AG Recommendation #1: Pension Asset Accounting	2
Advisory Panel Compensation	2
IESO Accounting	3
AG Recommendation #2: IESO Market Accounts	3
AG Recommendation #5: IESO Market Accounts & Rate-Regulated Accounting	4
AG Audit of 2017 Statements	4
Ontario's Fair Hydro Plan	7
AG Recommendation #3: OFHP Accounting	7
AG Recommendation #6: "Legislated Accounting"	12
AG Recommendation #9: Arm's Length Trusts	17
Records Disclosure/Process	18
Re-Design of Hydro Bills	20
Pre-Election Report	21
AG Recommendation #10: Pre-Election Report on Ontario's Finances	21
Province's Fiscal Situation	22
Recommendation #7: Province's Debt Burden	22
Financial Accountability Office Reports	22
Credit Ratings	22
Preparation of Public Accounts	23
AG Recommendation # 4: External Advisors	23
AG Recommendation #8: Timeline of Finalization of Financial Statements	23
Audit Opinion	23
Other	Error! Bookmark not defined.

PENSION ASSET ACCOUNTING

AG Recommendation #1: Pension Asset Accounting

For QAs related to:	See:
Pension Asset Accounting	Treasury Board Secretariat

Advisory Panel Compensation

For QAs related to:	See:
Pension Asset Accounting	Treasury Board Secretariat

IESO ACCOUNTING

AG Recommendation #2: IESO Market Accounts

- The Independent Electricity System Operator's (IESO) accounting changes are supported by IESO's audit committee, board of directors, its independent external auditor and by the Office of the Provincial Controller.
- The IESO prepares its financial statements in accordance with Canadian Public Sector Accounting Standards (PSAS), and received an unqualified, or clean, audit opinion on its 2016 financial statements.
- The change to include market account assets and liabilities in the financial statements provides increased transparency with respect to the value of transactions that flow through Ontario's electricity market.
- The government supports the enhanced reporting and greater transparency for the economic activities of IESO resulting from the recognition of the market accounts.

For QAs related to:	See:
Government decision to accept IESO market accounts	Treasury Board Secretariat

Q. Why did the IESO choose to recognize market accounts?

The Independent Electricity System Operator (IESO) began recognizing its market accounts' assets (amounts due from power distributors) and liabilities (amounts due to power producers) in their financial results. The IESO has chosen to recognize these markets accounts on its books for transparency reasons, as it better reflects its net financial position on behalf of IESO-administered markets at year-end.

This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. It also brought IESO in line with seven of the eight other independent system operators in North America. These accounting changes were highlighted in the IESO's 2016 annual report which was published online in March 2017.

This change has no impact to the province's annual deficit, net debt or accumulated deficit.

This accounting change has been supported by the professional accounting staff of the Office of the Provincial Controller.

We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.

AG Recommendation #5: IESO Market Accounts & Rate-Regulated Accounting

- The Independent Electricity System Operator (IESO) management, IESO's Audit Committee, IESO's Board of Directors, IESO's external auditor and the Office of the Provincial Controller all support the use of rate-regulated accounting by IESO.
- In the development of Ontario's Fair Hydro Plan (OFHP), the government consulted with several third party advisors in the application of accounting standards. This is normal course of business governments take for complex transactions.

For QAs related to:	See:
Government decision to accept IESO market accounts & rate-regulated accounting	Treasury Board Secretariat

Q. Why did the IESO choose to adopt rate-regulated accounting?

The Independent Electricity System Operator (IESO) made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model and instead are recovered through rate regulation.

The IESO, like Hydro One and Ontario Power Generation (OPG), is regulated by the Ontario Energy Board (OEB).

The IESO adopted rate-regulated accounting for its year ended December 31, 2016. The impact on the financial statements of the Province is a decrease of \$82 million in the 2016-17 opening accumulated deficit and an increase in the 2016-17 annual deficit by \$24 million.

This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in IESO's annual report which was published online in March 2017.

Q. What was the financial impact of these accounting changes, on Ontario's electricity rate payers?

These changes in no way affect Independent Electricity System Operator's (IESO) costs, or have any financial impact on electricity ratepayers.

Ultimately, IESO made these changes because it will provide the users of its financial statements greater transparency into the market transactions it oversees, which amounted to \$17 billion last year, and better reflects the economic substance of IESO expenses that are recovered through rate-regulation.

AG Audit of 2017 Statements

- We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.
- The Ministry of Energy, the Ministry of Finance and the Treasury Board Secretariat remain committed to assisting the Office of the Auditor General so that it can provide its independent views to the Legislative Assembly.
- With regards to the Auditor General's report on Ontario's Fair Hydro Plan (OFHP) – while the government does not agree with the assertions and conclusions expressed in the report, the government thanks the Office of the Auditor General for its report.
- While we expect professional accountants to agree on the vast majority of issues, we acknowledge that they may not agree on everything and when that occurs, and the difference is material to the financial statements, the Office of the Auditor General can choose to issue a qualified audit opinion.

For QAs related to:	See:
Relationship with Auditor General	Treasury Board Secretariat

Q. How will IESO respond to the Auditor General's decision to audit the 2017 consolidated financial statements?

The Independent Electricity System Operator (IESO) recognizes the Auditor General's statutory role and authority to perform an audit of IESO.

The IESO is cooperating with the Office of the Auditor General to provide information, including the 2017 financial statements prepared by management, and for access to management for assistance in understanding such information.

The IESO has likewise instructed its audit partner to cooperate with the Auditor General's audit.

Q. The Auditor General says that the Independent Electricity System Operator's decision to adopt rate-regulated accounting was a deviation from Public Sector Accounting Standards, and cautioned against its use in her Independent Auditor's Report. Why was this change made and was it appropriate?

Canadian Public Sector Accounting Standards (PSAS) are effectively silent on this issue of whether or not to adopt rate-regulated accounting as the preferred accounting method – they neither explicitly permit, nor prohibit, the recognition, measurement, presentation or disclosure of rate-regulated activities.

In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards for guidance.

Paragraph 11 of the *Introduction to Public Sector Accounting Standards* (“Introduction”) states: “When applying the CPA Canadian Public Sector Accounting (PSA) Handbook, where the standards are silent on an issue, public sector entities should apply Generally Accepted Accounting Principles (GAAP), Section PS 1150.”

In this case, the Independent Electricity System Operator (IESO) consulted U.S. Generally Accepted Accounting Principles (GAAP), the appropriate accounting framework in North America that provides guidance on rate-regulated operations. The IESO made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model.

The IESO, like Hydro One and Ontario Power Generation (OPG), is regulated by the Ontario Energy Board (OEB). The IESO adopted rate-regulated accounting for its year ended December 31, 2016.

This accounting change was accepted by IESO’s independent external auditor, which issued an unqualified, or “clean,” audit opinion. These accounting changes were highlighted in IESO’s annual report which was published online in March 2017.

It is worth noting that currently 8 out of 9 electricity system operators in North American markets employ accounting for rate-regulated assets, including IESO.

Q. The Auditor General says that the use of rate-regulated accounting is inappropriate for the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB) according to U.S. Generally Accepted Accounting Principles. How do you respond?

In commenting on the use of rate-regulated accounting and the role of the Ontario Energy Board (OEB), the Auditor General’s report makes reference to a requirement under U.S. accounting standards in connection with the use of rate-regulated accounting that “there must be an independent regulator.”

This reference is misleading as it does not provide the criteria in its entirety, which is as follows:

“The entity’s rates for regulated services or products provided to its customers are established by or are subject to approval by an independent, third-party regulator or by its own governing board empowered by statute or contract to establish rates that bind customers” [ASC 980-10-15-2].

The U.S. accounting standard was developed specifically to not preclude the application of rate-regulated accounting by government utilities where the rate regulator would not necessarily be viewed as independent (FAS 71, par. 64).

In addition, the position that rate-regulated accounting is precluded because the OEB is not considered independent of the government of Ontario is contradictory to accepting the use of rate-regulated accounting by Ontario Power Generation (OPG) and Hydro One – both of which are regulated by the OEB and whose results, using rate-regulated accounting, are and have been included in the consolidated financial statements of the Province.

IESO Response

Canadian Public Sector Accounting Standards (PSAS) are effectively silent on this issue – they neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.

In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards.

In this case, IESO consulted U.S. Generally Accepted Accounting Principles (GAAP), the appropriate accounting framework in North America that provides guidance on rate-regulated operations.

ONTARIO'S FAIR HYDRO PLAN

AG Recommendation #3: OFHP Accounting

- The province will continue to prepare its consolidated financial statements in accordance with Public Sector Accounting Standards (PSAS).
- The proposed accounting for the refinancing of the Global Adjustment (GA) aspect of Ontario Fair Hydro Plan (OFHP) reflects the economic substance of the transaction by differentiating costs borne by taxpayers versus those borne by ratepayers.
- PSAS is silent on a key accounting issue regarding the OFHP – the standards neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.
- In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards for guidance.

For QAs related to:	See:
Decision to accept OFHP accounting	Treasury Board Secretariat

Q. Why did the government introduce the Ontario Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

To address the impact of our electricity system investments on consumers, Ontario's Fair Hydro Plan includes:

- Refinancing the Global Adjustment (GA) over a longer term period for Regulated Price Plan (RPP) eligible consumers, including families, small businesses and farms.
- Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill. Eligible consumers will receive additional funding through assistance programs including:
 - o Establishing a new Affordability Fund which will support Ontarians who are not eligible for the [Home Assistance Program](#) and who have difficulty paying their electricity bills.
 - o Broadening Rural or Remote Rate Protection (RRRP) to provide distribution charge relief for the customers of the local distribution companies (LDC's) with the highest distribution charges.
 - o Expanding the Ontario Electricity Support Program (OESP) to increase participation and provide further assistance to eligible participants.
 - o Establishing a new On-Reserve First Nations Delivery Rate.
- Improving sector efficiency and modernizing Ontario's electricity market, working in collaboration with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).
- Any rate increases over the next four years will be held to the rate of inflation.

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

In the development of Ontario Fair Hydro Plan, the government made the decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity social programs, such as OESP and RRRP. At the same time, the government also made a policy decision that these new measures would be more appropriately funded from the tax-base, not the rate-base.

If pressed on the cost of these new and enhanced social programs:

On March 2, 2017, the government publicly announced the enhancement of the existing OESP and RRRP and the new Affordability Fund and on-reserve First Nations delivery credit. At the time, the government indicated that these new measures would cost the government up to \$2.5 billion over the next three years.

Refinancing the Global Adjustment

To reduce pressure on today's electricity consumers, a portion of Global Adjustment (GA) costs is being refinanced. In later years, the cost of financing will be recovered from consumers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

In developing the policy to refinance the GA, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a clean, reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's renewable electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that renewable generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets. This is the basis for the spreading of the costs across present and future generations of rate-payers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;

- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with internal and external legal, accounting, financial and energy sector experts, including third-party experts, to provide advice and ensure due diligence was completed.

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? How much is the program expected to cost?

Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.

Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately \$20 billion³. The preliminary estimate from March 2017 was about \$28 billion⁴.

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about \$28 billion⁵ to approximately \$20 billion⁶. These estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Would it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).

³ Ministry of Energy

⁴ Ministry of Energy, submission to Financial Accountability Officer

⁵ Ministry of Energy

⁶ Ministry of Energy

OPG currently manages approximately \$20 billion⁷ in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors⁸, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than \$2 billion⁹ and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

Q. The Auditor General and the Financial Accountability Office both suggest that the cost of borrowing will be more expensive than traditional government borrowing? Is this true?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

Ontario Power Generation (OPG) was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

⁷ Ontario Financing Authority

⁸ Ontario Power Generation

⁹ Ontario Power Generation

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

With respect to the \$4 billion¹⁰ figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately \$20 billion¹¹. The preliminary estimate from March 2017 was about \$28 billion¹².

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about \$ 28 billion¹³ to approximately \$20 billion¹⁴. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

¹⁰ Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

¹¹ Ministry of Energy

¹² Ministry of Energy, submission to Financial Accountability Officer

¹³ Ministry of Energy

¹⁴ Ministry of Energy

The government estimates of total interest cost also decreased from \$25 billion¹⁵ to less than \$19 billion¹⁶.

Q. How does the 3.357% price of the Ontario Power Generation's Fair Hydro Trust's first issuance of senior notes compare with the Ministry of Energy's Fair Allocation Amount (FAA) assumptions?

A number of inputs will vary over the thirty-year life of the Global Adjustment (GA) refinancing program and will continue to be revised to reflect changing conditions (e.g., changes in interest rates).

The Ministry analysis underpinning the 2017 Fair Allocation Amount (2017 FAA) included a 5.0% average interest rate over the life of the GA refinancing program (i.e., 30 years). Note: Navigant's modelling of GA refinancing assumed an interest rate of 4.5%. In the development of the 2017 FAA the interest rate assumptions were revised to 5% based on consultations with OPG.

On February 6, 2017, OPG announced that it was able to secure an interest rate of 3.357% for the senior debt on its first issuance that has a 15 year term and a value of \$500 million.

OPG advises that the remainder of the debt is split between "subordinated" and "junior subordinated" debt. The effective interest rate will be the weighted average of these three series of debt (i.e., senior, subordinated and junior subordinated). OPG is expected to finalize the pricing for the subordinated and junior subordinated debt within the next 48 hours. The pricing will be based in part on the pricing of the senior series.

Q. Some say you are unfairly placing the burden of debt on future generations through things like Ontario's Fair Hydro Plan, how do you respond?

The OFHP is designed to ensure that future generations will be paying their fair share for a system they will be benefiting from in their lifetime.

Over the last decade Ontario has rebuilt our transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. Since 2003, nearly \$70 billion has been invested in the electricity system, including more than \$37 billion in electricity generation to ensure the system is clean and reliable.

To address the impact of our electricity system investments on consumers, Ontario's Fair Hydro Plan includes:

¹⁵ Ministry of Energy

¹⁶ Ministry of Energy

- Refinancing the Global Adjustment (GA) over a longer term period for Regulated Price Plan (RPP) eligible consumers, including families, small businesses and farms.
- Helping vulnerable electricity consumers by enhancing electricity support programs and shifting costs off the electricity bill. Eligible consumers will receive additional funding through assistance programs including:
 - o Establishing a new Affordability Fund which will support Ontarians who are not eligible for the [Home Assistance Program](#) and who have difficulty paying their electricity bills.
 - o Broadening Rural or Remote Rate Protection (RRRP) to provide distribution charge relief for the customers of the local distribution companies (LDC's) with the highest distribution charges.
 - o Expanding the Ontario Electricity Support Program (OESP) to increase participation and provide further assistance to eligible participants.
 - o Establishing a new On-Reserve First Nations Delivery Rate.
- Improving sector efficiency and modernizing Ontario's electricity market, working in collaboration with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).
- Any rate increases over the next four years will be held to the rate of inflation.

In the development of Ontario Fair Hydro Plan, the government made the decision to provide rate relief to specific residential consumers through the introduction of new and enhanced electricity social programs, such as OESP and RRRP. At the same time, the government also made a policy decision that these new measures would be more appropriately funded from the tax-base, not the rate-base.

If pressed on the cost of these new and enhanced social programs:

On March 2, 2017, the government publicly announced the enhancement of the existing OESP and RRRP and the new Affordability Fund and on-reserve First Nations delivery credit. At the time, the government indicated that these new measures would cost the government up to \$2.5 billion over the next three years.

Refinancing the Global Adjustment

To reduce pressure on today's electricity consumers, a portion of Global Adjustment (GA) costs is being refinanced. In later years, the cost of financing will be recovered from consumers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

For example, IESO's Market Renewal initiative will result in a more efficient marketplace with competitive and transparent mechanisms that meet future system needs at the lowest cost. The initiative is expected to save up to \$5.2 billion¹⁷ over a 10-year period and forms a key component of Ontario's plan to ensure the affordability of electricity in the longer term.

¹⁷ Independent Electricity System Operator, *Assessment of the Benefits of Market Renewal* (Brattle Group)

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

AG Recommendation #6: "Legislated Accounting"

- The *Ontario Fair Hydro Plan Act, 2017* and its related regulations do not create accounting rules or legislate the accounting.
- It is important to distinguish legislating the accounting from legislating the right of the government to recover amounts from specified ratepayers in the future, which in the absence of legislation, would have been collected from specified ratepayers as the costs were incurred.
- The province, as always, will prepare its consolidated financial statements in accordance with PSAS, including the transactions resulting from Ontario's Fair Hydro Plan.

For QAs related to:	See:
Issue of OFHP "legislated" accounting	Treasury Board Secretariat

AG Recommendation #9: Arm's Length Trusts

- A Trust structure was selected to implement the Affordability Fund in order to provide an effective solution to distributing funds to electricity distributors. With approximately 65 distributors across Ontario, it was not feasible for the Province to enter into agreements with each distributor.
- The Trust structure establishes an independent entity with expertise from the electricity distributor and community sectors.
- There are report-back requirements on the use of funds transferred as well as the ability for the government to conduct an audit to gain assurance that the funds have been used for the purposes intended.
- The government will continue to assess the most appropriate vehicle for meeting its policy objectives, which include appropriate oversight of how transfer payments are spent.

For QAs related to:	See:

Accounting for Trust

Treasury Board Secretariat

Q. Why is there a need for an Affordability Fund?

From 2015 to early 2017, electricity distributors and other stakeholders indicated to the government that there was an immediate need to help customers struggling with their electricity bills, such as those in bill arrears and facing service disconnection.

Electricity distributors reported to the Ontario Energy Board (OEB) that around 56,500 customers were disconnected in 2015 and over 58,000 customers were disconnected in 2016. Electricity distributors also reported about 400,000 residential electricity accounts in arrears in 2016.

In January 2017, Hydro One submitted to the Ministry a report, “Addressing Affordability” which outlined a number of recommendations on electricity rate mitigation, including a recommendation to establish an Affordability Fund to assist struggling customers who do not qualify for low-income conservation programs.

Q. Who is eligible to benefit through the Affordability Fund and what measures will the average household receive?

Affordability Fund was established to provide energy efficiency measures to help those Ontarians not eligible for the Save on Energy Home Assistance Program, and who need support to improve the energy efficiency of their homes.

There are three levels of support available. The level each home qualifies for depends on net household income and average electricity bill. Measures offered may vary by participating electricity distributors:

- Level 1: households receive a Home Energy Kit with energy-saving products they can install themselves (e.g. LEDs, power bars, hot water pipe insulation).
- Level 2: Households may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include ENERGY STAR appliances (e.g. efficient air conditioners, refrigerators, and dehumidifiers).
- Level 3: For electrically-heated homes only, households that qualify for this level may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include insulation and/or an ENERGY STAR heat pump.

Q. How many households are expected to benefit from the Affordability Fund?

Number of households that the \$100 million investment in the Affordability Fund will support will depend on the types of measures installed per household. Customers may be eligible to receive varying levels of support based on their total household income and average electricity bill.

As of January 12, 2018, 2,522 applications had been received by the Affordability Fund Trust, of which 1,794 have been delivered to 47 active LDCs. Eligible customers are expected to start receiving benefits through the Affordability Fund in early 2018. **Note:** Numbers are not static and should be updated (closer to Public Accounts) as they become available.

Records Disclosure/Process

- The Ministry conducted a search consistent with the 40 plus search terms provided by the Auditor General.
- The Ministry of Energy has selected McCarthys/Wortzmans to assist with processing and analysis of approximately 2.2 million records that resulted from the search of 81 custodians.
- The Ministry has been regularly providing the Auditor General batches of responsive documents.

For QAs related to:	See:
Records - TBS	Treasury Board Secretariat
Records - MOF	

Q. Why has the Ministry of Energy not provided all e-mails requested by the Auditor General?

As of October 26, 2017, the Ministry has provided all responsive records (more than 73,000 emails) to the AG.

Q. How much money did the Ministry spend on lawyers?

Although the retainer agreement includes a cap of up to \$500,000, the Ministry of Energy spent approximately \$150,000 on the retainer.

Q. What was the Ministry of Energy's process for providing the emails requested by the Auditor General?

The Ministry conducted a search consistent with the 40 plus search terms provided to the AG. In order to manage the approximately 2.2 million records resulted from the

search of 81 custodians, the Ministry of Energy selected McCarthys/Wortzmans to assist with processing and analysis of the documents.

No legal advice on relevancy of documents was provided by Wortzmans. The Ministry completed its response to the AG on October 26, 2017.

Re-Design of Hydro Bills

- The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills.
- Comparisons of costs from previous billing periods will continue to be possible.
- Electricity bills are a customer's main window into the electricity system. Through the LTEP consultation process, the government heard that customers found their bills confusing and inaccessible.
- Hydro One has been a leader in consumer research on ways to improve the appearance and comprehension of its bill. Hydro One enlisted the services of a behavioural research firm and engaged with thousands of customers to develop a new bill design which has been observed to increase customer satisfaction and comprehension.
- Building on this research, the Ministry launched the Bill Redesign Action Plan with the aim of revising the regulatory framework on invoicing to improve the value of electricity bills for consumers. The Ministry continues to engage with industry and consumers to better understand consumer concerns and preferences with respect to the bill to ensure that any proposed changes to the bill's design will meet consumer's needs.

For QAs related to:	See:
N/A	N/A

Q. Isn't the problem the amount on people's bills, not the design?

The government recognizes that the much-needed investments in our electricity system have led to higher electricity prices. That's why the government developed Ontario's Fair Hydro Plan (OFHP) – to relieve the cost pressures caused by these system improvements.

Through the 2017 Long Term Energy Plan (2017 LTEP) consultation process, the government heard that consumers find their current bills confusing and inaccessible, as part of 2017 LTEP, the Ministry committed to continue to work with the Ontario Energy Board (OEB), industry and consumers to explore opportunities to redesign electricity bills to make them easier for customers to understand.

Q. How can Ontarian's know redesigning bills isn't just a way to hide increases?

The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills. Comparisons of costs from previous billing periods will continue to be possible.

Q. What Is the overall cost of the bill redesign?

Each LDC will have different costs to implement a re-designed bill depending on current billing and customer information systems. Changes to billing systems are a part of an LDC's cost of doing business.

Q. Are all customers in Ontario getting redesigned bills, or just in some areas?

All LDCs will be required to comply with any new requirements implemented as part of a bill-redesign initiative. By March 31, 2018, all LDCs will come into compliance with the new requirement to provide customer-specific OFHP savings on invoices.

Q How do the new regulatory amendments to require that LDCs provide customer-specific savings associated with Ontario's Fair Hydro Plan on invoices fit in to the broader redesign action plan?

The requirement for dynamic messaging or customer-specific Fair Hydro savings on invoices is the first step in the broader, longer term bill re-design project. Providing customer specific savings promotes greater understanding of the associated bill impacts of Ontario's Fair Hydro Plan (OFHP) for consumers.

The new regulatory amendments are being discussed with industry stakeholders as part of the bill redesign working group.

The Ministry of Energy is continuing to work with stakeholders to examine opportunities to redesign electricity bills to make them more understandable and to give consumers the information that they want on the bill.

PRE-ELECTION REPORT**AG Recommendation #10: Pre-Election Report on Ontario's Finances**

For QAs related to:	See:
Pre-Election Report on Ontario's Finances	Treasury Board Secretariat Ministry of Finance

PROVINCE'S FISCAL SITUATION**Recommendation #7: Province's Debt Burden**

For QAs related to:	See:
Ontario's Debt Burden	Ministry of Finance

Financial Accountability Office Reports

For QAs related to:	See:
FAO Reports	Ministry of Finance

Credit Ratings

For QAs related to:	See:
Credit Ratings	Ministry of Finance

PREPARATION OF PUBLIC ACCOUNTS**AG Recommendation # 4: External Advisors**

For QAs related to:	See:
External Advisors	Treasury Board Secretariat

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

AG Recommendation #8: Timeline of Finalization of Financial Statements

For QAs related to:	See:
Finalization of Financial Statements	Treasury Board Secretariat Ministry of Finance

Audit Opinion

For QAs related to:	See:
Audit Opinions	Treasury Board Secretariat

DRAFT

QUESTIONS & ANSWERS

Contents

Pension Asset Accounting	2
AG Recommendation #1: Pension Asset Accounting	2
Advisory Panel Compensation	2
IESO Accounting	3
AG Recommendation #2: IESO Market Accounts	3
AG Recommendation #5: IESO Market Accounts & Rate-Regulated Accounting	4
AG Audit of 2017 Statements	4
Ontario's Fair Hydro Plan	7
AG Recommendation #3: OFHP Accounting	7
AG Recommendation #6: "Legislated Accounting"	12
AG Recommendation #9: Arm's Length Trusts	15
Records Disclosure/Process	16
Re-Design of Hydro Bills	18
Pre-Election Report	20
AG Recommendation #10: Pre-Election Report on Ontario's Finances	20
Province's Fiscal Situation	21
Recommendation #7: Province's Debt Burden	21
Financial Accountability Office Reports	21
Credit Ratings	21
Preparation of Public Accounts	22
AG Recommendation # 4: External Advisors	22
AG Recommendation #8: Timeline of Finalization of Financial Statements	22
Audit Opinion	22
Other	Error! Bookmark not defined.

PENSION ASSET ACCOUNTING

AG Recommendation #1: Pension Asset Accounting

For QAs related to:	See:
Pension Asset Accounting	Treasury Board Secretariat

Advisory Panel Compensation

For QAs related to:	See:
Pension Asset Accounting	Treasury Board Secretariat

IESO ACCOUNTING**AG Recommendation #2: IESO Market Accounts**

- The Independent Electricity System Operator's (IESO) accounting changes are supported by IESO's audit committee, board of directors, its independent external auditor and by the Office of the Provincial Controller.
- The IESO prepares its financial statements in accordance with Canadian Public Sector Accounting Standards (PSAS), and received an unqualified, or clean, audit opinion on its 2016 financial statements.
- The change to include market account assets and liabilities in the financial statements provides increased transparency with respect to the value of transactions that flow through Ontario's electricity market.
- The government supports the enhanced reporting and greater transparency for the economic activities of IESO resulting from the recognition of the market accounts.

For QAs related to:	See:
Government decision to accept IESO market accounts	Treasury Board Secretariat

Q. Why did the IESO choose to recognize market accounts?

The Independent Electricity System Operator (IESO) began recognizing its market accounts' assets (amounts due from power distributors) and liabilities (amounts due to power producers) in their financial results. The IESO has chosen to recognize these markets accounts on its books for transparency reasons, as it better reflects its net financial position on behalf of IESO-administered markets at year-end.

This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. It also brought IESO in line with seven of the eight other independent system operators in North America. These accounting changes were highlighted in the IESO's 2016 annual report which was published online in March 2017.

This change has no impact to the province's annual deficit, net debt or accumulated deficit.

This accounting change has been supported by the professional accounting staff of the Office of the Provincial Controller.

We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.

AG Recommendation #5: IESO Market Accounts & Rate-Regulated Accounting

- The Independent Electricity System Operator (IESO) management, IESO's Audit Committee, IESO's Board of Directors, IESO's external auditor and the Office of the Provincial Controller all support the use of rate-regulated accounting by IESO.
- In the development of Ontario's Fair Hydro Plan (OFHP), the government consulted with several third party advisors in the application of accounting standards. This is normal course of business governments take for complex transactions.

For QAs related to:	See:
Government decision to accept IESO market accounts & rate-regulated accounting	Treasury Board Secretariat

Q. Why did the IESO choose to adopt rate-regulated accounting?

The Independent Electricity System Operator (IESO) made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model and instead are recovered through rate regulation.

The IESO, like Hydro One and Ontario Power Generation (OPG), is regulated by the Ontario Energy Board (OEB).

The IESO adopted rate-regulated accounting for its year ended December 31, 2016. The impact on the financial statements of the Province is a decrease of \$82 million in the 2016-17 opening accumulated deficit and an increase in the 2016-17 annual deficit by \$24 million.

This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in IESO's annual report which was published online in March 2017.

Q. What was the financial impact of these accounting changes, on Ontario's electricity rate payers?

These changes in no way affect Independent Electricity System Operator's (IESO) costs, or have any financial impact on electricity ratepayers.

Ultimately, IESO made these changes because it will provide the users of its financial statements greater transparency into the market transactions it oversees, which amounted to \$17 billion last year, and better reflects the economic substance of IESO expenses that are recovered through rate-regulation.

AG Audit of 2017 Statements

- We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.
- The Ministry of Energy, the Ministry of Finance and the Treasury Board Secretariat remain committed to assisting the Office of the Auditor General so that it can provide its independent views to the Legislative Assembly.
- With regards to the Auditor General's report on Ontario's Fair Hydro Plan (OFHP) – while the government does not agree with the assertions and conclusions expressed in the report, the government thanks the Office of the Auditor General for its report.
- While we expect professional accountants to agree on the vast majority of issues, we acknowledge that they may not agree on everything and when that occurs, and the difference is material to the financial statements, the Office of the Auditor General can choose to issue a qualified audit opinion.

For QAs related to:	See:
Relationship with Auditor General	Treasury Board Secretariat

Q. How will IESO respond to the Auditor General's decision to audit the 2017 consolidated financial statements?

The Independent Electricity System Operator (IESO) recognizes the Auditor General's statutory role and authority to perform an audit of IESO.

The IESO is cooperating with the Office of the Auditor General to provide information, including the 2017 financial statements prepared by management, and for access to management for assistance in understanding such information.

The IESO has likewise instructed its audit partner to cooperate with the Auditor General's audit.

Q. The Auditor General says that the Independent Electricity System Operator's decision to adopt rate-regulated accounting was a deviation from Public Sector Accounting Standards, and cautioned against its use in her Independent Auditor's Report. Why was this change made and was it appropriate?

Canadian Public Sector Accounting Standards (PSAS) are effectively silent on this issue of whether or not to adopt rate-regulated accounting as the preferred accounting method – they neither explicitly permit, nor prohibit, the recognition, measurement, presentation or disclosure of rate-regulated activities.

In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards for guidance.

Paragraph 11 of the *Introduction to Public Sector Accounting Standards* ("Introduction") states: "When applying the CPA Canadian Public Sector Accounting (PSA) Handbook, where the standards are silent on an issue, public sector entities should apply Generally Accepted Accounting Principles (GAAP), Section PS 1150."

In this case, the Independent Electricity System Operator (IESO) consulted U.S. Generally Accepted Accounting Principles (GAAP), the appropriate accounting framework in North America that provides guidance on rate-regulated operations. The IESO made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model.

The IESO, like Hydro One and Ontario Power Generation (OPG), is regulated by the Ontario Energy Board (OEB). The IESO adopted rate-regulated accounting for its year ended December 31, 2016.

This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in IESO's annual report which was published online in March 2017.

It is worth noting that currently 8 out of 9 electricity system operators in North American markets employ accounting for rate-regulated assets, including IESO.

Q. The Auditor General says that the use of rate-regulated accounting is inappropriate for the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB) according to U.S. Generally Accepted Accounting Principles. How do you respond?

In commenting on the use of rate-regulated accounting and the role of the Ontario Energy Board (OEB), the Auditor General's report makes reference to a requirement under U.S. accounting standards in connection with the use of rate-regulated accounting that "there must be an independent regulator."

This reference is misleading as it does not provide the criteria in its entirety, which is as follows:

"The entity's rates for regulated services or products provided to its customers are established by or are subject to approval by an independent, third-party regulator or by its own governing board empowered by statute or contract to establish rates that bind customers" [ASC 980-10-15-2].

The U.S. accounting standard was developed specifically to not preclude the application of rate-regulated accounting by government utilities where the rate regulator would not necessarily be viewed as independent (FAS 71, par. 64).

In addition, the position that rate-regulated accounting is precluded because the OEB is not considered independent of the government of Ontario is contradictory to accepting the use of rate-regulated accounting by Ontario Power Generation (OPG) and Hydro One – both of which are regulated by the OEB and whose results, using rate-regulated accounting, are and have been included in the consolidated financial statements of the Province.

IESO Response

Canadian Public Sector Accounting Standards (PSAS) are effectively silent on this issue – they neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.

In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards.

In this case, IESO consulted U.S. Generally Accepted Accounting Principles (GAAP), the appropriate accounting framework in North America that provides guidance on rate-regulated operations.

ONTARIO'S FAIR HYDRO PLAN

AG Recommendation #3: OFHP Accounting

- The province will continue to prepare its consolidated financial statements in accordance with Public Sector Accounting Standards (PSAS).
- The proposed accounting for the refinancing of the Global Adjustment (GA) aspect of Ontario Fair Hydro Plan (OFHP) reflects the economic substance of the transaction by differentiating costs borne by taxpayers versus those borne by ratepayers.
- PSAS is silent on a key accounting issue regarding the OFHP – the standards neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.
- In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards for guidance.

For QAs related to:	See:
Decision to accept OFHP accounting	Treasury Board Secretariat

Q. Why did the government introduce the Ontario Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

To address the impact of our electricity system investments on consumers, the following initiatives are being undertaken.

First, a portion of Global Adjustment (GA) costs is being refinanced to reduce pressure on today's electricity consumers. In later years, the cost of financing will be recovered from consumers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts. Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

In developing the policy to refinance the ~~Global Adjustment (GA)~~, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

Second, the province has introduced rate relief programs and expanded existing ones.

In addition, a number of important programs such as the Ontario Electricity Support Program (OESP) and the Rural or Remote Rate Protection (RRRP) program are now funded from provincial revenues instead of by electricity consumers (i.e., from the rate-base).

The province has also launched a new Affordability Fund, enhanced the existing OESP, and is providing on-reserve First Nations with a delivery credit.

GA refinancing is designed so that deferred costs are borne by the rate base, as the beneficiaries of the electricity system, and not the tax base.

Commented [AL1]: Covered above

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a clean, reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's renewable electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that renewable generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets. This is the basis for the spreading of the costs across present and future generations of rate-payers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with internal and external legal, accounting, financial and energy sector experts, including third-party experts, to provide advice and ensure due diligence was completed.

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? How much is the program expected to cost?

Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.

Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately \$20 billion³. The preliminary estimate from March 2017 was about \$28 billion⁴.

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

³ Ministry of Energy

⁴ Ministry of Energy, submission to Financial Accountability Officer

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about \$28 billion⁵ to approximately \$20 billion⁶. These estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Would it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).

OPG currently manages approximately \$20 billion⁷ in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors⁸, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than \$2 billion⁹ and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

⁵ Ministry of Energy

⁶ Ministry of Energy

⁷ Ontario Financing Authority

⁸ Ontario Power Generation

⁹ Ontario Power Generation

Q. The Auditor General and the Financial Accountability Office both suggest that the cost of borrowing will be more expensive than traditional government borrowing? Is this true?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

Ontario Power Generation (OPG) was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

With respect to the \$4 billion¹⁰ figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately \$20 billion¹¹. The preliminary estimate from March 2017 was about \$28 billion¹².

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

¹⁰ Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

¹¹ Ministry of Energy

¹² Ministry of Energy, submission to Financial Accountability Officer

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about \$ 28 billion¹³ to approximately \$20 billion¹⁴. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from \$25 billion¹⁵ to less than \$19 billion¹⁶.

Q. Some say you are unfairly placing the burden of debt on future generations through things like Ontario's Fair Hydro Plan, how do you respond?

The OFHP is designed to ensure that future generations will be paying their fair share for a system they will be benefiting from in their lifetime. ~~Not only will they benefit from a reliable electricity system, but also from cleaner air resulting from the elimination of coal-fired generation.~~

Over the last decade Ontario has rebuilt our transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. Since 2003, nearly \$70 billion has been invested in the electricity system, including more than \$37 billion in electricity generation to ensure the system is clean and reliable.

To address the impact of our electricity system investments on consumers, the following initiatives are being undertaken.

First, a portion of Global Adjustment (GA) costs is being refinanced to reduce pressure on today's electricity consumers. In later years, the cost of financing will be recovered from consumers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. The majority of the province's electricity generators have 20-year contracts.

¹³ Ministry of Energy

¹⁴ Ministry of Energy

¹⁵ Ministry of Energy

¹⁶ Ministry of Energy

Many of these generators will be able to operate past their contract term, meaning that generating assets are expected to have ongoing useful life and will benefit future ratepayers by reducing the need to finance the development of new generating assets.

Electricity bills have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

Second, the province has introduced rate relief programs and expanded existing ones.

In addition, a number of important programs such as the Ontario Electricity Support Program (OESP) and the Rural or Remote Rate Protection (RRRP) program are now funded from provincial revenues instead of by electricity consumers (i.e., from the rate-base).

The province has also launched a new Affordability Fund, enhanced the existing OESP, and is providing on-reserve First Nations with a delivery credit.

Ontario's Fair Hydro Plan (OFHP) acts much like taking out a new mortgage—providing much-needed relief now by spreading costs across the life of our assets. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency

and enhance opportunities for innovation and competition to further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

For example, IESO's Market Renewal initiative will result in a more efficient marketplace with competitive and transparent mechanisms that meet future system needs at the lowest cost. The initiative is expected to save up to \$5.2 billion¹⁷ over a 10-year period and forms a key component of Ontario's plan to ensure the affordability of electricity in the longer term.

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

AG Recommendation #6: "Legislated Accounting"

- The *Ontario Fair Hydro Plan Act, 2017* and its related regulations do not create accounting rules or legislate the accounting.
- It is important to distinguish legislating the accounting from legislating the right of the government to recover amounts from specified ratepayers in the future, which in the absence of legislation, would have been collected from specified ratepayers as the costs were incurred.
- The province, as always, will prepare its consolidated financial statements in accordance with PSAS, including the transactions resulting from Ontario's Fair Hydro Plan.

For QAs related to:	See:
Issue of OFHP "legislated" accounting	Treasury Board Secretariat

AG Recommendation #9: Arm's Length Trusts

¹⁷ Independent Electricity System Operator, *Assessment of the Benefits of Market Renewal* (Brattle Group)

- A Trust structure was selected to implement the Affordability Fund in order to provide an effective solution to distributing funds to electricity distributors. With approximately 65 distributors across Ontario, it was not feasible for the Province to enter into agreements with each distributor.
- The Trust structure establishes an independent entity with expertise from the electricity distributor and community sectors.
- There are report-back requirements on the use of funds transferred as well as the ability for the government to conduct an audit to gain assurance that the funds have been used for the purposes intended.
- The government will continue to assess the most appropriate vehicle for meeting its policy objectives, which include appropriate oversight of how transfer payments are spent.

For QAs related to:	See:
Accounting for Trust	Treasury Board Secretariat

Q. Why is there a need for an Affordability Fund?

From 2015 to early 2017, electricity distributors and other stakeholders indicated to the government that there was an immediate need to help customers struggling with their electricity bills, such as those in bill arrears and facing service disconnection.

Electricity distributors reported to the Ontario Energy Board (OEB) that around 56,500 customers were disconnected in 2015 and over 58,000 customers were disconnected in 2016. Electricity distributors also reported about 400,000 residential electricity accounts in arrears in 2016.

In January 2017, Hydro One submitted to the Ministry a report, "Addressing Affordability" which outlined a number of recommendations on electricity rate mitigation, including a recommendation to establish an Affordability Fund to assist struggling customers who do not qualify for low-income conservation programs.

Q. Who is eligible to benefit through the Affordability Fund and what measures will the average household receive?

Affordability Fund was established to provide energy efficiency measures to help those Ontarians not eligible for the Save on Energy Home Assistance Program, and who need support to improve the energy efficiency of their homes.

There are three levels of support available. The level each home qualifies for depends on net household income and average electricity bill. Measures offered may vary by participating electricity distributors:

- Level 1: households receive a Home Energy Kit with energy-saving products they can install themselves (e.g. LEDs, power bars, hot water pipe insulation).

- Level 2: Households may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include ENERGY STAR appliances (e.g. efficient air conditioners, refrigerators, and dehumidifiers).
- Level 3: For electrically-heated homes only, households that qualify for this level may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include insulation and/or an ENERGYSTAR heat pump.

Q. How many households are expected to benefit from the Affordability Fund?

Number of households that the \$100 million investment in the Affordability Fund will support will depend on the types of measures installed per household. Customers may be eligible to receive varying levels of support based on their total household income and average electricity bill.

As of January 12, 2018, 2,522 applications had been received by the Affordability Fund Trust, of which 1,794 have been delivered to 47 active LDCs. Eligible customers are expected to start receiving benefits through the Affordability Fund in early 2018. **Note:** Numbers are not static and should be updated (closer to Public Accounts) as they become available.

Records Disclosure/Process

- The Ministry conducted a search consistent with the 40 plus search terms provided by the Auditor General.
- The Ministry of Energy has selected McCarthys/Wortzmans to assist with processing and analysis of approximately 2.2 million records that resulted from the search of 81 custodians.
- The Ministry has been regularly providing the Auditor General batches of responsive documents.

For QAs related to:	See:
Records - TBS	Treasury Board Secretariat
Records - MOF	

Q. Why has the Ministry of Energy not provided all e-mails requested by the Auditor General?

As of October 26, 2017, the Ministry has provided all responsive records (more than 73,000 emails) to the AG.

Q. How much money did the Ministry spend on lawyers?

Although the retainer agreement includes a cap of up to \$500,000, the Ministry of Energy spent approximately \$150,000 on the retainer.

Q. What was the Ministry of Energy's process for providing the emails requested by the Auditor General?

The Ministry conducted a search consistent with the 40 plus search terms provided to the AG. In order to manage the approximately 2.2 million records resulted from the search of 81 custodians, the Ministry of Energy selected McCarthys/Wortzmans to assist with processing and analysis of the documents.

No legal advice on relevancy of documents was provided by Wortzmans. The Ministry completed its response to the AG on October 26, 2017.

Re-Design of Hydro Bills

- The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills.
- Comparisons of costs from previous billing periods will continue to be possible.
- Electricity bills are a customer's main window into the electricity system. Through the LTEP consultation process, the government heard that customers found their bills confusing and inaccessible.
- Hydro One has been a leader in consumer research on ways to improve the appearance and comprehension of its bill. Hydro One enlisted the services of a behavioural research firm and engaged with thousands of customers to develop a new bill design which has been observed to increase customer satisfaction and comprehension.
- Building on this research, the Ministry launched the Bill Redesign Action Plan with the aim of revising the regulatory framework on invoicing to improve the value of electricity bills for consumers. The Ministry continues to engage with industry and consumers to better understand consumer concerns and preferences with respect to the bill to ensure that any proposed changes to the bill's design will meet consumer's needs.

For QAs related to:	See:
N/A	N/A

Q. Isn't the problem the amount on people's bills, not the design?

The government recognizes that the much-needed investments in our electricity system have led to higher electricity prices. That's why the government developed Ontario's Fair Hydro Plan (OFHP) – to relieve the cost pressures caused by these system improvements.

Through the 2017 Long Term Energy Plan (2017 LTEP) consultation process, the government heard that consumers find their current bills confusing and inaccessible, as part of 2017 LTEP, the Ministry committed to continue to work with the Ontario Energy Board (OEB), industry and consumers to explore opportunities to redesign electricity bills to make them easier for customers to understand.

Q. How can Ontarian's know redesigning bills isn't just a way to hide increases?

The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills. Comparisons of costs from previous billing periods will continue to be possible.

Q. What Is the overall cost of the bill redesign?

Each LDC will have different costs to implement a re-designed bill depending on current billing and customer information systems. Changes to billing systems are a part of an LDC's cost of doing business.

Q. Are all customers in Ontario getting redesigned bills, or just in some areas?

All LDCs will be required to comply with any new requirements implemented as part of a bill-redesign initiative. By March 31, 2018, all LDCs will come into compliance with the new requirement to provide customer-specific OFHP savings on invoices.

Q How do the new regulatory amendments to require that LDCs provide customer-specific savings associated with Ontario's Fair Hydro Plan on invoices fit in to the broader redesign action plan?

The requirement for dynamic messaging or customer-specific Fair Hydro savings on invoices is the first step in the broader, longer term bill re-design project. Providing customer specific savings promotes greater understanding of the associated bill impacts of Ontario's Fair Hydro Plan (OFHP) for consumers.

The new regulatory amendments are being discussed with industry stakeholders as part of the bill redesign working group.

The Ministry of Energy is continuing to work with stakeholders to examine opportunities to redesign electricity bills to make them more understandable and to give consumers the information that they want on the bill.

PRE-ELECTION REPORT**AG Recommendation #10: Pre-Election Report on Ontario's Finances**

For QAs related to:	See:
Pre-Election Report on Ontario's Finances	Treasury Board Secretariat Ministry of Finance

PROVINCE'S FISCAL SITUATION**Recommendation #7: Province's Debt Burden**

For QAs related to:	See:
Ontario's Debt Burden	Ministry of Finance

Financial Accountability Office Reports

For QAs related to:	See:
FAO Reports	Ministry of Finance

Credit Ratings

For QAs related to:	See:
Credit Ratings	Ministry of Finance

PREPARATION OF PUBLIC ACCOUNTS

AG Recommendation # 4: External Advisors

For QAs related to:	See:
External Advisors	Treasury Board Secretariat

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

AG Recommendation #8: Timeline of Finalization of Financial Statements

For QAs related to:	See:
Finalization of Financial Statements	Treasury Board Secretariat Ministry of Finance

Audit Opinion

For QAs related to:	See:
Audit Opinions	Treasury Board Secretariat

DRAFT

QUESTIONS & ANSWERS

Contents

Pension Asset Accounting	2
AG Recommendation #1: Pension Asset Accounting	2
Advisory Panel Compensation	2
IESO Accounting	3
AG Recommendation #2: IESO Market Accounts	3
AG Recommendation #5: IESO Market Accounts & Rate-Regulated Accounting	4
AG Audit of 2017 Statements	4
Ontario's Fair Hydro Plan	7
AG Recommendation #3: OFHP Accounting	7
AG Recommendation #6: "Legislated Accounting"	11
AG Recommendation #9: Arm's Length Trusts	14
Records Disclosure/Process	14
Re-Design of Hydro Bills	16
Pre-Election Report	18
AG Recommendation #10: Pre-Election Report on Ontario's Finances	18
Province's Fiscal Situation	19
Recommendation #7: Province's Debt Burden	19
Financial Accountability Office Reports	19
Credit Ratings	19
Preparation of Public Accounts	20
AG Recommendation # 4: External Advisors	20
AG Recommendation #8: Timeline of Finalization of Financial Statements	20
Audit Opinion	20
Other	Error! Bookmark not defined.

PENSION ASSET ACCOUNTING

AG Recommendation #1: Pension Asset Accounting

For QAs related to:	See:
Pension Asset Accounting	Treasury Board Secretariat

Advisory Panel Compensation

For QAs related to:	See:
Pension Asset Accounting	Treasury Board Secretariat

IESO ACCOUNTING

AG Recommendation #2: IESO Market Accounts

- The Independent Electricity System Operator's (IESO) accounting changes are supported by IESO's audit committee, board of directors, its independent external auditor and by the Office of the Provincial Controller.
- The IESO prepares its financial statements in accordance with Canadian Public Sector Accounting Standards (PSAS), and received an unqualified, or clean, audit opinion on its 2016 financial statements.
- The change to include market account assets and liabilities in the financial statements provides increased transparency with respect to the value of transactions that flow through Ontario's electricity market.
- The government supports the enhanced reporting and greater transparency for the economic activities of IESO resulting from the recognition of the market accounts.

For QAs related to:	See:
Government decision to accept IESO market accounts	Treasury Board Secretariat

Q. Why did the IESO choose to recognize market accounts?

The Independent Electricity System Operator (IESO) began recognizing its market accounts' assets (amounts due from power distributors) and liabilities (amounts due to power producers) in their financial results. The IESO has chosen to recognize these markets accounts on its books for transparency reasons, as it better reflects its net financial position on behalf of IESO-administered markets at year-end.

This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. It also brought IESO in line with seven of the eight other independent system operators in North America. These accounting changes were highlighted in the IESO's 2016 annual report which was published online in March 2017.

This change has no impact to the province's annual deficit, net debt or accumulated deficit.

This accounting change has been supported by the professional accounting staff of the Office of the Provincial Controller.

We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.

AG Recommendation #5: IESO Market Accounts & Rate-Regulated Accounting

- The Independent Electricity System Operator (IESO) management, IESO's Audit Committee, IESO's Board of Directors, IESO's external auditor and the Office of the Provincial Controller all support the use of rate-regulated accounting by IESO.
- In the development of Ontario's Fair Hydro Plan (OFHP), the government consulted with several third party advisors in the application of accounting standards. This is normal course of business governments take for complex transactions.

For QAs related to:	See:
Government decision to accept IESO market accounts & rate-regulated accounting	Treasury Board Secretariat

Q. Why did the IESO choose to adopt rate-regulated accounting?

The Independent Electricity System Operator (IESO) made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model and instead are recovered through rate regulation.

The IESO, like Hydro One and Ontario Power Generation (OPG), is regulated by the Ontario Energy Board (OEB).

The IESO adopted rate-regulated accounting for its year ended December 31, 2016. The impact on the financial statements of the Province is a decrease of \$82 million in the 2016-17 opening accumulated deficit and an increase in the 2016-17 annual deficit by \$24 million.

This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in IESO's annual report which was published online in March 2017.

Q. What was the financial impact of these accounting changes, on Ontario's electricity rate payers?

These changes in no way affect Independent Electricity System Operator's (IESO) costs, or have any financial impact on electricity ratepayers.

Ultimately, IESO made these changes because it will provide the users of its financial statements greater transparency into the market transactions it oversees, which amounted to \$17 billion last year, and better reflects the economic substance of IESO expenses that are recovered through rate-regulation.

AG Audit of 2017 Statements

- We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.
- The Ministry of Energy, the Ministry of Finance and the Treasury Board Secretariat remain committed to assisting the Office of the Auditor General so that it can provide its independent views to the Legislative Assembly.
- With regards to the Auditor General's report on Ontario's Fair Hydro Plan (OFHP) – while the government does not agree with the assertions and conclusions expressed in the report, the government thanks the Office of the Auditor General for its report.
- While we expect professional accountants to agree on the vast majority of issues, we acknowledge that they may not agree on everything and when that occurs, and the difference is material to the financial statements, the Office of the Auditor General can choose to issue a qualified audit opinion.

For QAs related to:	See:
Relationship with Auditor General	Treasury Board Secretariat

Q. How will IESO respond to the Auditor General's decision to audit the 2017 consolidated financial statements?

The Independent Electricity System Operator (IESO) recognizes the Auditor General's statutory role and authority to perform an audit of IESO.

The IESO is cooperating with the Office of the Auditor General to provide information, including the 2017 financial statements prepared by management, and for access to management for assistance in understanding such information.

The IESO has likewise instructed its audit partner to cooperate with the Auditor General's audit.

Q. The Auditor General says that the Independent Electricity System Operator's decision to adopt rate-regulated accounting was a deviation from Public Sector Accounting Standards, and cautioned against its use in her Independent Auditor's Report. Why was this change made and was it appropriate?

Canadian Public Sector Accounting Standards (PSAS) are effectively silent on this issue of whether or not to adopt rate-regulated accounting as the preferred accounting method – they neither explicitly permit, nor prohibit, the recognition, measurement, presentation or disclosure of rate-regulated activities.

In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards for guidance.

Paragraph 11 of the *Introduction to Public Sector Accounting Standards* (“Introduction”) states: “When applying the CPA Canadian Public Sector Accounting (PSA) Handbook, where the standards are silent on an issue, public sector entities should apply Generally Accepted Accounting Principles (GAAP), Section PS 1150.”

In this case, the Independent Electricity System Operator (IESO) consulted U.S. Generally Accepted Accounting Principles (GAAP), the appropriate accounting framework in North America that provides guidance on rate-regulated operations. The IESO made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model.

The IESO, like Hydro One and Ontario Power Generation (OPG), is regulated by the Ontario Energy Board (OEB). The IESO adopted rate-regulated accounting for its year ended December 31, 2016.

This accounting change was accepted by IESO’s independent external auditor, which issued an unqualified, or “clean,” audit opinion. These accounting changes were highlighted in IESO’s annual report which was published online in March 2017.

It is worth noting that currently 8 out of 9 electricity system operators in North American markets employ accounting for rate-regulated assets, including IESO.

Q. The Auditor General says that the use of rate-regulated accounting is inappropriate for the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB) according to U.S. Generally Accepted Accounting Principles. How do you respond?

In commenting on the use of rate-regulated accounting and the role of the Ontario Energy Board (OEB), the Auditor General’s report makes reference to a requirement under U.S. accounting standards in connection with the use of rate-regulated accounting that “there must be an independent regulator.”

This reference is misleading as it does not provide the criteria in its entirety, which is as follows:

“The entity’s rates for regulated services or products provided to its customers are established by or are subject to approval by an independent, third-party regulator or by its own governing board empowered by statute or contract to establish rates that bind customers” [ASC 980-10-15-2].

The U.S. accounting standard was developed specifically to not preclude the application of rate-regulated accounting by government utilities where the rate regulator would not necessarily be viewed as independent (FAS 71, par. 64).

In addition, the position that rate-regulated accounting is precluded because the OEB is not considered independent of the government of Ontario is contradictory to accepting the use of rate-regulated accounting by Ontario Power Generation (OPG) and Hydro One – both of which are regulated by the OEB and whose results, using rate-regulated accounting, are and have been included in the consolidated financial statements of the Province.

IESO Response

Canadian Public Sector Accounting Standards (PSAS) are effectively silent on this issue – they neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.

In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards.

In this case, IESO consulted U.S. Generally Accepted Accounting Principles (GAAP), the appropriate accounting framework in North America that provides guidance on rate-regulated operations.

ONTARIO'S FAIR HYDRO PLAN

AG Recommendation #3: OFHP Accounting

- The province will continue to prepare its consolidated financial statements in accordance with Public Sector Accounting Standards (PSAS).
- The proposed accounting for the refinancing of the Global Adjustment (GA) aspect of Ontario Fair Hydro Plan (OFHP) reflects the economic substance of the transaction by differentiating costs borne by taxpayers versus those borne by ratepayers.
- PSAS is silent on a key accounting issue regarding the OFHP – the standards neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.
- In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards for guidance.

For QAs related to:	See:
Decision to accept OFHP accounting	Treasury Board Secretariat

Q. Why did the government introduce the Ontario Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a clean, reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's renewable electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that renewable generating assets

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets. This is the basis for the spreading of the costs across present and future generations of rate-payers.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with internal and external legal, accounting, financial and energy sector experts, including third-party experts, to provide advice and ensure due diligence was completed.

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? How much is the program expected to cost?

Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.

Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately \$20 billion³. The preliminary estimate from March 2017 was about \$28 billion⁴.

³ Ministry of Energy

⁴ Ministry of Energy, submission to Financial Accountability Officer

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about \$28 billion⁵ to approximately \$20 billion⁶. These estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Would it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).

OPG currently manages approximately \$20 billion⁷ in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors⁸, including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than \$2 billion⁹ and two commercial paper programs.

⁵ Ministry of Energy

⁶ Ministry of Energy

⁷ Ontario Financing Authority

⁸ Ontario Power Generation

⁹ Ontario Power Generation

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

Q. The Auditor General and the Financial Accountability Office both suggest that the cost of borrowing will be more expensive than traditional government borrowing? Is this true?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

Ontario Power Generation (OPG) was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

With respect to the \$4 billion¹⁰ figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately \$20 billion¹¹. The preliminary estimate from March 2017 was about \$28 billion¹².

¹⁰ Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

¹¹ Ministry of Energy

¹² Ministry of Energy, submission to Financial Accountability Officer

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about \$ 28 billion¹³ to approximately \$20 billion¹⁴. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from \$25 billion¹⁵ to less than \$19 billion¹⁶.

Q. Some say you are unfairly placing the burden of debt on future generations through things like Ontario's Fair Hydro Plan, how do you respond?

The OFHP is designed to ensure that future generations will be paying their fair share for a system they will be benefiting from in their lifetime. Not only will they benefit from a reliable electricity system, but also from cleaner air resulting from the elimination of coal-fired generation.

Ontario's Fair Hydro Plan (OFHP) acts much like taking out a new mortgage – providing much-needed relief now by spreading costs across the life of our assets. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to further reduce system

¹³ Ministry of Energy

¹⁴ Ministry of Energy

¹⁵ Ministry of Energy

¹⁶ Ministry of Energy

costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

For example, IESO's Market Renewal initiative will result in a more efficient marketplace with competitive and transparent mechanisms that meet future system needs at the lowest cost. The initiative is expected to save up to \$5.2 billion¹⁷ over a 10-year period and forms a key component of Ontario's plan to ensure the affordability of electricity in the longer term.

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

AG Recommendation #6: "Legislated Accounting"

- The *Ontario Fair Hydro Plan Act, 2017* and its related regulations do not create accounting rules or legislate the accounting.
- It is important to distinguish legislating the accounting from legislating the right of the government to recover amounts from specified ratepayers in the future, which in the absence of legislation, would have been collected from specified ratepayers as the costs were incurred.
- The province, as always, will prepare its consolidated financial statements in accordance with PSAS, including the transactions resulting from Ontario's Fair Hydro Plan.

For QAs related to:	See:
Issue of OFHP "legislated" accounting	Treasury Board Secretariat

¹⁷ Independent Electricity System Operator, *Assessment of the Benefits of Market Renewal (Brattle Group)*

AG Recommendation #9: Arm's Length Trusts

- A Trust structure was selected to implement the Affordability Fund in order to provide an effective solution to distributing funds to electricity distributors. With approximately 65 distributors across Ontario, it was not feasible for the Province to enter into agreements with each distributor.
- The Trust structure establishes an independent entity with expertise from the electricity distributor and community sectors.
- There are report-back requirements on the use of funds transferred as well as the ability for the government to conduct an audit to gain assurance that the funds have been used for the purposes intended.
- The government will continue to assess the most appropriate vehicle for meeting its policy objectives, which include appropriate oversight of how transfer payments are spent.

For QAs related to:	See:
Accounting for Trust	Treasury Board Secretariat

Q. Why is there a need for an Affordability Fund?

From 2015 to early 2017, electricity distributors and other stakeholders indicated to the government that there was an immediate need to help customers struggling with their electricity bills, such as those in bill arrears and facing service disconnection.

Electricity distributors reported to the Ontario Energy Board (OEB) that around 56,500 customers were disconnected in 2015 and over 58,000 customers were disconnected in 2016. Electricity distributors also reported about 400,000 residential electricity accounts in arrears in 2016.

In January 2017, Hydro One submitted to the Ministry a report, "Addressing Affordability" which outlined a number of recommendations on electricity rate mitigation, including a recommendation to establish an Affordability Fund to assist struggling customers who do not qualify for low-income conservation programs.

Q. Who is eligible to benefit through the Affordability Fund and what measures will the average household receive?

Affordability Fund was established to provide energy efficiency measures to help those Ontarians not eligible for the Save on Energy Home Assistance Program, and who need support to improve the energy efficiency of their homes.

There are three levels of support available. The level each home qualifies for depends on net household income and average electricity bill. Measures offered may vary by participating electricity distributors:

- Level 1: households receive a Home Energy Kit with energy-saving products they can install themselves (e.g. LEDs, power bars, hot water pipe insulation).
- Level 2: Households may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include ENERGY STAR appliances (e.g. efficient air conditioners, refrigerators, and dehumidifiers).
- Level 3: For electrically-heated homes only, households that qualify for this level may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include insulation and/or an ENERGYSTAR heat pump.

Q. How many households are expected to benefit from the Affordability Fund?

Number of households that the \$100 million investment in the Affordability Fund will support will depend on the types of measures installed per household. Customers may be eligible to receive varying levels of support based on their total household income and average electricity bill.

As of January 12, 2018, 2,522 applications had been received by the Affordability Fund Trust, of which 1,794 have been delivered to 47 active LDCs. Eligible customers are expected to start receiving benefits through the Affordability Fund in early 2018. **Note:** Numbers are not static and should be updated (closer to Public Accounts) as they become available.

Records Disclosure/Process

- The Ministry conducted a search consistent with the 40 plus search terms provided by the Auditor General.
- The Ministry of Energy has selected McCarthys/Wortzmans to assist with processing and analysis of approximately 2.2 million records that resulted from the search of 81 custodians.
- The Ministry has been regularly providing the Auditor General batches of responsive documents.

For QAs related to:	See:
Records - TBS	Treasury Board Secretariat
Records - MOF	

Q. Why has the Ministry of Energy not provided all e-mails requested by the Auditor General?

As of October 26, 2017, the Ministry has provided all responsive records (more than 73,000 emails) to the AG.

Q. How much money did the Ministry spend on lawyers?

Although the retainer agreement includes a cap of up to \$500,000, the Ministry of Energy spent approximately \$150,000 on the retainer.

Q. What was the Ministry of Energy's process for providing the emails requested by the Auditor General?

The Ministry conducted a search consistent with the 40 plus search terms provided to the AG. In order to manage the approximately 2.2 million records resulted from the search of 81 custodians, the Ministry of Energy selected McCarthys/Wortzmans to assist with processing and analysis of the documents.

No legal advice on relevancy of documents was provided by Wortzmans. The Ministry completed its response to the AG on October 26, 2017.

Re-Design of Hydro Bills

- The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills.
- Comparisons of costs from previous billing periods will continue to be possible.
- Electricity bills are a customer's main window into the electricity system. Through the LTEP consultation process, the government heard that customers found their bills confusing and inaccessible.
- Hydro One has been a leader in consumer research on ways to improve the appearance and comprehension of its bill. Hydro One enlisted the services of a behavioural research firm and engaged with thousands of customers to develop a new bill design which has been observed to increase customer satisfaction and comprehension.
- Building on this research, the Ministry launched the Bill Redesign Action Plan with the aim of revising the regulatory framework on invoicing to improve the value of electricity bills for consumers. The Ministry continues to engage with industry and consumers to better understand consumer concerns and preferences with respect to the bill to ensure that any proposed changes to the bill's design will meet consumer's needs.

For QAs related to:	See:
N/A	N/A

Q. Isn't the problem the amount on people's bills, not the design?

The government recognizes that the much-needed investments in our electricity system have led to higher electricity prices. That's why the government developed Ontario's Fair Hydro Plan (OFHP) – to relieve the cost pressures caused by these system improvements.

Through the 2017 Long Term Energy Plan (2017 LTEP) consultation process, the government heard that consumers find their current bills confusing and inaccessible, as part of 2017 LTEP, the Ministry committed to continue to work with the Ontario Energy Board (OEB), industry and consumers to explore opportunities to redesign electricity bills to make them easier for customers to understand.

Q. How can Ontarian's know redesigning bills isn't just a way to hide increases?

The objective of the bill redesign initiative is to make bills easier for customers to understand and ensure that they get the most useful information out of their bills. Comparisons of costs from previous billing periods will continue to be possible.

Q. What Is the overall cost of the bill redesign?

Each LDC will have different costs to implement a re-designed bill depending on current billing and customer information systems. Changes to billing systems are a part of an LDC's cost of doing business.

Q. Are all customers in Ontario getting redesigned bills, or just in some areas?

All LDCs will be required to comply with any new requirements implemented as part of a bill-redesign initiative. By March 31, 2018, all LDCs will come into compliance with the new requirement to provide customer-specific OFHP savings on invoices.

Q How do the new regulatory amendments to require that LDCs provide customer-specific savings associated with Ontario's Fair Hydro Plan on invoices fit in to the broader redesign action plan?

The requirement for dynamic messaging or customer-specific Fair Hydro savings on invoices is the first step in the broader, longer term bill re-design project. Providing customer specific savings promotes greater understanding of the associated bill impacts of Ontario's Fair Hydro Plan (OFHP) for consumers.

The new regulatory amendments are being discussed with industry stakeholders as part of the bill redesign working group.

The Ministry of Energy is continuing to work with stakeholders to examine opportunities to redesign electricity bills to make them more understandable and to give consumers the information that they want on the bill.

PRE-ELECTION REPORT**AG Recommendation #10: Pre-Election Report on Ontario's Finances**

For QAs related to:	See:
Pre-Election Report on Ontario's Finances	Treasury Board Secretariat Ministry of Finance

PROVINCE'S FISCAL SITUATION**Recommendation #7: Province's Debt Burden**

For QAs related to:	See:
Ontario's Debt Burden	Ministry of Finance

Financial Accountability Office Reports

For QAs related to:	See:
FAO Reports	Ministry of Finance

Credit Ratings

For QAs related to:	See:
Credit Ratings	Ministry of Finance

PREPARATION OF PUBLIC ACCOUNTS**AG Recommendation # 4: External Advisors**

For QAs related to:	See:
External Advisors	Treasury Board Secretariat

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

AG Recommendation #8: Timeline of Finalization of Financial Statements

For QAs related to:	See:
Finalization of Financial Statements	Treasury Board Secretariat Ministry of Finance

Audit Opinion

For QAs related to:	See:
Audit Opinions	Treasury Board Secretariat

DRAFT

Energy

Q. What is the Industrial Conservation Initiative (ICI) and how does it provide benefits to the electricity system?

Response

The Industrial Conservation Initiative (ICI) is a demand response program and cost allocation mechanism. It has been in place since 2011.

The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours. This benefits companies financially. It also benefits the electricity system by reducing the need for peaking generation, which reduces system costs that would otherwise need to be recovered from all Ontario ratepayers.

The ICI is a voluntary program and eligible consumers are able to opt in or out in June of each year. Today, there are about 1,100 companies enrolled in the program across a variety of sectors.

Through the program, the consumers who contribute the least to peak demand pay a smaller portion of costs associated with electricity generation, conservation and demand management programs.

In other words, ICI participants are charged Global Adjustment (GA) in proportion to their contribution to the top five system peak hours in a year.

Global Adjustment

Before I go any further, I think it would be best to provide a very brief overview of what the Global Adjustment (GA) is.

The Global Adjustment (GA) is a mechanism that recovers certain electricity system costs. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity and amounts owed to generators to ensure they can recover their fixed costs. The Global Adjustment also recovers the costs of running conservation programs in the province.

The market price for electricity, known as the Hourly Ontario Energy Price (HOEP), is calculated each hour and represents the marginal cost of producing power at that time. If HOEP is lower than a generator's regulated or contracted rate, Global Adjustment makes up the difference. When market prices exceed these contracted and regulated costs, suppliers have to pay back the difference.

As a result, the Global Adjustment varies from month to month, responding to changes in the HOEP. Generally speaking, when HOEP is lower, GA is higher, and vice versa. The GA is also impacted when new projects come in to service, contract payments take effect, or as a result of changes in demand. The combination of the HOEP and GA represent the total commodity cost of electricity.

All consumers pay GA, but there is variation in how different types of customers are charged. Most customers, that is anyone not enrolled in the ICI, pay a volumetric charge. This means that they pay the same GA rate on every kilowatt-hour consumed. If you're a typical residential consumer, for example, the GA is built into the price of a kilowatt-hour of power that you see on your bill. In some cases the GA shows up as a separate line item on their bill.

However, participants in the ICI program are charged GA based on the proportion of their electricity demand compared to the total provincial electricity demand in the top five system peak hours in a year. If a consumer is assessed to be responsible for one per cent of Ontario's peak demand in those five highest hours, they will be charged for one per cent of total GA costs each month through the next year. Peak hours depend on a number of factors, such as time of day, time of year, and the weather.

ICI participants manage their GA costs by consuming less during peak hours. So they work to forecast when system peak hours will occur, and then work to reduce consumption during those hours. They can respond using any number of strategies, such as changing the operating profiles of industrial equipment.

Benefits of Industrial Conservation Initiative (ICI)

The Industrial Conservation Initiative provides a number of system benefits. First, because ICI provides a reduction in Ontario peak demand, it helps defer the need to build expensive new peaking generation facilities in the longer term, reducing costs for all ratepayers across the province: residential, commercial and industrial.

By keeping peak system demand as low as it can be, we are making the system more cost-effective for all ratepayers into the future.

Second, it better aligns consumer prices with the consumer's contribution to total system costs. Consumers who are drawing electricity from the system at times of peak demand in the province pay a larger proportion of the costs.

Simply put, ICI is fair because it is designed to match each customer's share of costs with their contribution to those costs.

Lastly, through lower industrial prices, the ICI works to retain manufacturing load in the province, meaning that these manufacturers continue to contribute towards fixed system costs that would otherwise be borne by remaining consumers.

The ICI helps industrial consumers lower their electricity prices by one-third on average. It helps them to remain competitive and focused on creating jobs for Ontarians across the province.

Thanks in part to the ICI, industrial electricity prices in Ontario are lower than the average price in the rest of the Great Lakes region, according to the U.S. Energy Information Administration.

We have been taking steps to make sure that Ontario businesses are aware of the program and how it can help them improve their competitiveness and keep providing jobs. We have partnered with the Ontario Chamber of Commerce (OCC) to ensure that all Ontario businesses are aware of the benefits of this program. OCC is leading the campaign to raise awareness amongst Ontario consumers.

History of Industrial Conservation Initiative and Expansions

Since ICI was introduced in 2011, it has undergone changes to respond to customer demand.

At first, the ICI was available to consumers with peak demand above five megawatts (MW). In July 2015, this was extended to consumers operating in select sectors with average monthly peak demand greater than 3 MW. These sectors included the mining, refrigerated warehousing, greenhouses and data processing sectors.

In January 2017, we further expanded the program to include more than one thousand customers with monthly peak demand greater than one megawatt. In addition, sector restrictions were removed and smaller industrial, institutional and commercial businesses were eligible to participate.

As part of Ontario's Fair Hydro Plan, the ICI has been expanded again to include smaller manufacturers and greenhouses with peak demand between 500 kW and 1 MW. Newly eligible participants would have begun to see the impact on their July 2017 bills.

Prior to the 2017 expansions, there were approximately 300 ICI participants. As I mentioned earlier, right now there are approximately 1,100 participants, many of which would not have previously been eligible but realized they could benefit their organizations by opting in to the program.

Expanding participation in the ICI program has reduced electricity demand during peak periods, and it has reduced electricity bills for new ICI participants who are able to reduce their electricity demand during peak demand periods.

ICI Effectiveness and Results

The ICI has been very successful at reducing peak electricity demand. In fact, our system operator estimates that this program reduced peak demand by about 1,300 MW in 2016. That's about 6 per cent of Ontario's peak electricity demand, and is equivalent to the peak electricity demand of

a city roughly the size of Mississauga. It's about twice as much as the output of Halton Hills Generating Station west of the Greater Toronto Area.

The Ministry of Energy is focused on both meeting demand for electricity and taking costs out of the electricity system wherever possible. Reducing peak demand has played an important role in both of these objectives.

Thanks in part to lower peak demand, the contracts for several Non-Utility Generator (NUG) facilities have recently ended and these facilities have not been re-contracted.

In addition, the second round of the large renewable procurement process (LRP II) and the Energy-from-Waste Standard Offer Program have been suspended, which is expected to save up to \$3.8 billion in electricity system costs relative to the 2013 forecast.

Future expected reductions in peak demand due to the ICI are also factored into the cost forecasts included in the recently released 2017 Long-Term Energy Plan.

The Industrial Conservation Initiative is about fairness for all consumers – large and small. We made the policy decision that it makes sense for electricity consumers to pay for electricity system costs proportionally to their contribution to the incurrence of those costs.

Further, the ICI program will continue to play an important role in helping us bring down total system costs, which will put downward pressure on electricity bills for everyone moving forward.

Conclusion

The Industrial Conservation Initiative (ICI) benefits electricity consumers by reducing demand at peak periods, helping to reduce the need to build more peaking electricity generation in the long-term.

Our electricity system is planned to ensure we have enough generation to meet peak demand.

By keeping peak system demand as low as it can be, we can avoid building costly new generation.

This makes the system more cost-effective for all ratepayers.

Our system operator estimates that this program reduced peak demand by about 1,300 megawatts in 2016 – the peak electricity demand of a city roughly the size of Mississauga.

The Ministry of Energy continues to monitor and report on the impact of the ICI program on the electricity system, including reductions in peak demand and impacts on all classes of electricity consumers.

The results of the ICI program can be seen in monthly Independent Electricity System Operator (IESO) reports and the quarterly Ontario Energy Report.

Ministry of Energy – Proposed Friendly Questions:

1. To the Deputy Minister of Energy, why is keeping the financing costs of Ontario's Fair Hydro Plan (OFHP) on the rate-base, as opposed to the tax-base appropriate?

And, why is Ontario Power Generation (OPG) best placed to minimize the cost of the overall program from your perspective?

Policy Objectives of OFHP

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP has introduced new measures to lower electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

Refinancing the Global Adjustment (GA) is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.

Electricity bills ~~Bills~~ have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

Formatted: Font: Italic, Underline

Formatted: Font: Italic, Underline

Formatted: No Spacing, Indent: Left: 0.63 cm

Formatted: Indent: Left: 0 cm

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Development of OFHP

Formatted: Font: Italic, Underline

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options. Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks and take ~~necessay~~necessary actions to meet the mandate.

The senior officials and staff included:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

The government also consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed. This is normal course of business governments take for complex transactions.

Role of Ontario Power Generation (OPG)

Formatted: Font: Italic, Underline

OPG was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations. Financing requirements are determined by the legislation and will be funded through the Trust.

OPG will arrange for the third party debt, and supplement this funding through the Province and additional funds contributed by OPG, through increased equity in the Trust at equivalent market rates.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

OPG currently manages approximately \$20 billion in segregated nuclear funds to manage nuclear liabilities and is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience in regulatory deferral and variance accounts.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For example, the Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors, including major investors in the Canadian power and utility bonds markets.

In terms of administration, OPG is currently managing its own corporate public debt program, three project financing programs ~~totalling~~totaling more than \$2 billion and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs

OPG is uniquely positioned to be the Financial Services Managers, understands the characteristics of the market, regularly interacts with the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO), and has experience in Treasury operations in the marketplace including relationships with the credit rating agencies.

~~OPG has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.~~

~~The total estimated cost of the program has been revised downwards substantially to reflect revised inputs, including updated long-term cost projections for the electricity system and residential bills provided by the Independent Electricity System Operator (IESO). Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately \$20 billion. The preliminary estimate from March 2017 was about \$28 billion.~~

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions. Each of these factors will need to be managed and monitored closely.

With respect to the \$4 billion figure referenced by the Financial Accountability Office (FAO), it should be noted that the report was based on the initial Ministry of Energy estimates from March 2017. The FAO simply took an estimated cost of borrowing for the Ontario Financing Authority (OFA) and OPG and applied the difference to debt estimates based on Ministry of Energy data from March.

Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

The FAO report itself concluded by saying "the FAO's estimates are subject to many assumptions and uncertainties (...) Fiscal impact may differ significantly from the FAO's estimates."

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long-term long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

Commented [HS(1)]: We need a better closing section.

This is friendly questions, not sure why we're highlighting these points.

Ministry of Energy – Proposed Friendly Questions:

1. **To the Deputy Minister of Energy, why is keeping the financing costs of Ontario's Fair Hydro Plan (OFHP) on the rate-base, as opposed to the tax-base appropriate?**

And, why is the Ontario Power Generation (OPG) best placed to minimize the cost of the overall program from your perspective?

Response

- OFHP operates under a financial and accounting framework that is appropriate for the intended purpose.
- It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.
- OFHP is comprised of a series of policy decisions.
- The impact of some of these decisions will be borne by the Province (taxpayers) where appropriate, such as sales tax relief and shifting social programs to the tax base; some will be borne by ratepayers, such as spreading the investment costs and benefits across ratepayers more fairly.
- While the implementation of OFHP is ongoing, with significant decisions with accounting and financial implications still being finalized, the financing plan for OFHP and its impact will be transparent.
- Credit rating agencies, securities regulators, and the public will see full information and full reporting of the impacts of OFHP.
- Ontario has a strong track record of producing high-quality financial reports on a timely basis.
- Ontario will continue to move forward and present the Province's finances fairly and accurately and in accordance with PSAS.

Commented [HA(1)]: Unfortunately not much pre-existing language on this, hoping policy can help us fill in the blank here.

Commented [HA(2)]: Messaging taken from OPG Tech Briefing QA currently with policy.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

2. To Independent Electricity System Operator (IESO), how did IESO come to the conclusion that it was acceptable to use US Generally Accepted Accounting Principles (GAAP) instead of Public Sector Accounting Standards (PSAS) for rate regulated activities?

Commented [HA(3): Language predominantly from estimate friendlies

And, is there a clause or section of PSAS that permits the use of GAAP in a given scenario?

Response

- The IESO follows Public Sector Accounting Standards (PSAS) for its accounting.
- The PSAS neither explicitly permits, nor prohibits, the recognition, measurement, presentation or disclosure of rate-regulated activities.
- In absence of a clear position on an issue, standard accounting practice dictates that an entity is entitled to consult another accounting standard.
- If I may cite from the PSAS Handbook, Section 1150.18 and 19:

"Paragraphs PS 1150.19-.24 identify some of the other sources that a public sector reporting entity might consult to assist in selecting accounting policies and disclosures that comply with paragraph PS 1150.05. Pronouncements issued by other bodies authorized to issue accounting standards may be useful sources to consult.

For example, accounting pronouncements published with the authority of the Canadian Accounting Standards Board (AcSB), International Accounting Standards Board (IASB), US Federal Accounting Standards Advisory Board (FASAB), US Governmental Accounting Standards Board (GASB), or International Public Sector Accounting Standards Board (IPSASB) are often important sources to consult on matters not covered by primary sources of GAAP or for assistance in applying a primary source of GAAP to specific circumstances."

- In this case, IESO consulted US GAAP, the only accounting framework in North America that provides guidance on rate regulated operations. The IESO has since adopted aspects of the US GAAP accounting framework allowing IESO to recognize a regulatory asset.
- This decision was supported by an accounting opinion from our external auditors at KPMG and as we've just discussed, aligns IESO with six of the eight other independent system operators in North America.
- It's a decision IESO made after careful consideration and extensive consultation with external experts. In fact, more than one of the big-four accounting firms agree with our decision on this matter.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

- The IESO regularly reviews its accounting policies to ensure our financial reporting best represents our operations and the substance of the accounts we oversee.
- Prompted by conversation with government about Ontario's Fair Hydro Plan (OFHP) and recognizing the need to consider impacts of future government policy, IESO revisited its options for reporting market accounts and recognizing regulatory assets.
- Working with its audit partner KPMG, IESO determined that there were reporting options for market accounts and regulatory assets and that a choice was required as to whether or not to report these in IESO financial statements.
- By analyzing the nature of the accounts, IESO's economic relationship to them, legislative requirements and market rules it was concluded that an appropriate position for either treatment was acceptable.
- When we started looking into changes to our accounting policies, we wanted to look at other organizations that have similar mandates to us.
- Including IESO, there are 9 independent system operators in North America; seven in the U.S. and two in Canada: The IESO and Alberta's AESO.
- We had discussions with these organizations about their operations and accounting practices.
- We looked at their location, the accounting framework they follow, the type of organization they are (either not-for-profit or otherwise), whether they are subject to income tax, their capital structure, how they are governed, by which body they are regulated, and finally, whether they recognized balances of market participants and regulatory assets in their financial reporting.
- From this research, we found that 7 of the other 8 ISOs recognize the balances of the market participants. They are:
 1. **ISO New England**;
 2. **NYISO**, in New York;
 3. **MISO**, Midcontinent ISO which covers Midwest United States, Manitoba, and much of Arkansas, Mississippi and Louisiana;
 4. **PJM**, covering the eastern U.S. states: Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia;
 5. **CAISO**, in California;
 6. **ERCOT**, in Texas; and
 7. **Southwest Power Pool**, in central US.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

- When we talked to our counterparts across North America about regulatory assets, we found out that 6 of the other 8 entities recognize the economic effects of rate regulation, they are:
 1. **AESO**, in Alberta;
 2. ISO New England;
 3. NYISO;
 4. MISO;
 5. PJM; and
 6. ERCOT.
- I should mention that the two ISOs that do not recognize the effect of rate regulation are California ISO (CAISO) and Southwest Power Pool (SPP).
- When we talked to CAISO, we found out that their accounting framework actually allows for the recognition of regulatory assets and liabilities, but that it had concluded the need to recognize regulatory assets was no longer necessary.
- When we talked to Southwest Power Pool, we learned that they simply do not have any variance accounts that would qualify as regulatory assets or liabilities.
- So, when we looked at making the accounting change we considered that:
 1. Including **market accounts** on our financial statements would provide increased transparency into the value of transactions that flow through Ontario's \$17 billion electricity market;
 2. That **regulatory accounting** better reflected the economic substance of certain types of IESO expenses (like Smart Metering Entity expenses) which are recovered through a rate regulated by the OEB;
 3. That the change would **enhance the relevance, transparency and accountability of our financial reporting**;
 4. That this change would **bring IESO in line with its peers** across North America; and
 5. Finally, that this accounting change would in **no way affect IESO's costs, or have any financial impact on electricity ratepayers** – all these factors confirmed our decision to make the accounting change.
- Ultimately, IESO felt the public reporting of market accounts was relevant to the needs of its financial statement users and enabled greater transparency into the market transactions it oversees, which amounted to \$17 billion last year.
- We also felt that recognizing regulatory assets would provide more transparency into the substance of the variance accounts we oversee.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

- As we just covered, this change to recognize regulated assets and market accounts brings IESO in line with accounting practices followed by other independent system operators in North America.
- I should also mention, that in the past, the Ontario Power Authority, a predecessor organization of IESO, reported a subset of the market accounts on its financial statements – so this isn't new.
- To confirm our view that the change was appropriate, IESO engaged independent audit firm KPMG for accounting research on the matter.
- KPMG conducted their own research into the issue.
- KPMG subsequently issued a white paper on the accounting change, supporting the IESO's decision to change its accounting policy. The changes were also reviewed with and supported by the Office of the Provincial Controller.
- The accounting change was reviewed by IESO's Board of Directors, and approved.
- As part of our regular 2016 year-end audit, KPMG issued an accounting opinion on our financial reporting. The accounting firm issued an unqualified or "clean" accounting opinion, meaning they supported the decision.
- Finally, when publishing our 2016 financial statements, in order to communicate the change of accounting policy, IESO added additional notes in its 2016 financial statements to explain the changes in the Summary of Significant Accounting Policies section of its 2016 annual report.
- These changes in no way affect IESO's costs, or have any financial impact on electricity ratepayers.
- Ultimately, IESO made these changes because it will provide the users of its financial statements greater transparency into the market transactions it oversees, which amounted to \$17 billion last year, and better reflects the economic substance of IESO expenses that are recovered through rate-regulation.
- It is the auditor's responsibility to express an opinion on the financial statements based on their audit.
- In our case, KPMG conducted their audit in accordance with Canadian generally accepted accounting standards.
- Those accounting standards require that the auditors comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the entity's financial statements are free from material misstatement.
- Here are some of the things an audit looks into:
 - An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

- o The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.
 - o In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.
- In addition, an audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.
- In IESO's 2016 financial statements, KPMG stated: "We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion".
- This was followed by a statement of their unqualified opinion:
 - o In our opinion, the financial statements present fairly, in all material respects, the financial position of IESO as at December 31, 2016, and its results of operations and the changes in its new debt and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.
- This is taken directly from our 2016 financial statements, which are publically available.
- So the "unqualified opinion" is basically accounting-speak to say that the audit partner undertook the thorough audit process, applied the appropriate standards and believes the financial statements follow the appropriate accounting standard and fairly and accurately represent IESO's financial position at year-end.
- The IESO regularly reviews its accounting policies.
- Prompted by a discussion with government about Ontario's Fair Hydro Plan (OFHP), IESO revisited its options for reporting market accounts and recognizing regulatory assets.
- Working with its auditor, IESO determined that a choice was required as to whether or not to record Market Accounts and regulatory assets and liabilities in IESO financial statements.
- By analyzing the nature of the accounts, IESO's economic relationship to them, legislative requirements and market rules it was concluded that an appropriate position for either treatment was acceptable.
- In order to confirm our decision, IESO asked KPMG to conduct some research on our behalf into the appropriateness of adopting regulated accounting.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

- Their research agreed with our view that the recognition of regulatory assets and liabilities better reflects the economic substance of IESO's operations and enhances the relevance, transparency and accountability of its financial reporting.
- It also found that US GAAP was an appropriate accounting framework to look to for guidance on rate-regulated operations, since PSAS was silent on the issue. And that regulatory assets under ASC 980 is not an exemption from the application of US GAAP.
- Finally, KPMG found that the accounting change would bring IESO in line with the majority of its ISO peers across North America.
- When we considered the results of KPMG's research, along with the fact that the change would have no impact on IESO's costs, or have any financial impact on electricity ratepayers, we went ahead and made the accounting change.

3. To Ontario Power Generation (OPG), can you explain what sort of external expertise OPG enlisted?

And, can you explain what counsel these experts provided with respect to the structure that has been set up and the accounting that will be used?

Response

- Let me make a few remarks about OPG's qualifications as the financing manager of Ontario's Fair Hydro Plan:
- OPG currently manages an \$18 billion nuclear fund and as an entity regulated by the Ontario Energy Board (OEB), OPG also has extensive experience with regulatory deferral and variance accounts.
- OPG has the breadth and demonstrated track record in the financial markets including the highly successful inaugural public debt offering earlier in October, private placement of insurance linked bonds, participation in securitization programs, and the very successful project debt issuances tied to new hydroelectric developments.
- These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these financing structures have resulted in international recognition.
- OPG has also developed solid investor relationships and has a large investor base in the structured finance space who would be the target market for financing the Fair Hydro initiative.

Commented [HA(4)]: Again, hoping policy can help us lengthen this one.

Commented [HA(5)]: Language Predominantly Taken from Estimates friendlies.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

- For example, the Lower Mattagami project financing attracted a broad investor base of about 80 institutional investors, including major investors in the Canadian power and utility bonds market.
- In terms of administration, OPG is currently managing its own Corporate public debt and three project financing programs totaling more than \$2 billion, as well as two commercial paper programs.
- OPG will be acting as the Finance Service Manager (FSM) as prescribed under the Ontario Fair Hydro legislation, basically arranging for a variety of debt financing for the deferred costs.
- We will be setting up a financing entity in the form of a "Trust", which is ring fenced from the generation activities of OPG in an effort to reflect the unique nature of this business and not co-mingle the operational activities of the two businesses.
- The financing requirements are determined by the legislation and the reduction in consumers' bills and will be funded through the Trust.
- OPG will arrange for third party debt, supplement this funding with the Province, and OPG will contribute additional funds through increased equity and debt of the OPG operating company that will be lent to the Trust, also at equivalent market rates.
- OPG is uniquely positioned to be the financing manager of Ontario's Fair Hydro Plan as we understand the supply and demand characteristics of the market. As previously mentioned, we regularly interact with the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO), and we have experience in Treasury operations in the marketplace including relationships with credit rating agencies.
- There are three specific areas that we supplemented our team with external resources.
 - o First, was legal advice to ensure there is clear alignment between the legislation and the Trust and its related requirements and obligations.
 - o The second was financing advice directed at the capital markets again to ensure alignment with the markets focused on achieving the most cost effective financing to ensure the rate payer impact is minimized.
 - o The third was accounting advice directed at the set up and governance of the Trust and then to achieve the transparency in reporting that is critical.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

- As has been mentioned OPG has strong capabilities across these areas but felt it was prudent to ensure that all steps are taken to establish the Trust and its activities in a clear and transparent manner.
- The structure that has been set up in fact ensures a high level of transparency.
- As these deferred amounts are funded through third party financing, the process by design in financial market space requires disclosure and oversight including credit rating agencies, the OEB, external audit of the Trust itself, additional OPG disclosure in its reports, oversight from lenders through Trust indenture documents
- Ratepayers and taxpayers will be able to clearly see the financial results of the Trust as it relates to the legislation.
- All of this will be reported in OPG's financial reports on a quarterly and annual basis. OPG's financial reports are filed with the Ontario Securities Commission (OSC) and subject to OSC oversight.

Ministry of Energy – Proposed Friendly Questions:

1. To the Deputy Minister of Energy, why is keeping the financing costs of Ontario's Fair Hydro Plan (OFHP) on the rate-base, as opposed to the tax-base appropriate?

And, why is the Ontario Power Generation (OPG) best placed to minimize the cost of the overall program from your perspective?

2. To Independent Electricity System Operator (IESO), how did IESO come to the conclusion that it was acceptable to use US Generally Accepted Accounting Principles (GAAP) instead of Public Sector Accounting Standards (PSAS) for rate regulated activities?

And, is there a clause or section of PSAS that permits the use of GAAP in a given scenario?

3. To Ontario Power Generation (OPG), can you explain what sort of external expertise OPG enlisted?

And, can you explain what counsel these experts provided with respect to the structure that has been set up and the accounting that will be used?

Ministry of Energy – Proposed Friendly Questions:

1. To the Deputy Minister of Energy, why is keeping the financing costs of Ontario's Fair Hydro Plan (OFHP) on the rate-base, as opposed to the tax-base appropriate?

And, why is the Ontario Power Generation (OPG) best placed to minimize the cost of the overall program from your perspective?

2. To Independent Electricity System Operator (IESO), how did IESO come to the conclusion that it was acceptable to use US Generally Accepted Accounting Principles (GAAP) instead of Public Sector Accounting Standards (PSAS) for rate regulated activities?

And, is there a clause or section of PSAS that permits the use of GAAP in a given scenario?

3. To Ontario Power Generation (OPG), can you explain what sort of external expertise OPG enlisted?

And, can you explain what counsel these experts provided with respect to the structure that has been set up and the accounting that will be used?

Ministry of Energy – Proposed Friendly Questions:

1. To the Deputy Minister of Energy, why is keeping the financing costs of Ontario's Fair Hydro Plan (OFHP) on the rate-base, as opposed to the tax-base appropriate?

And, why is Ontario Power Generation (OPG) best placed to minimize the cost of the overall program from your perspective?

Policy Objectives of OFHP

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly \$70 billion¹ has been invested in the electricity system, including more than \$37² billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP has introduced new measures to lower electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

Refinancing the Global Adjustment (GA) is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.

Electricity bills ~~Bills~~ have been reduced for current ratepayers, and future ratepayers will in turn pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Given that the policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base. We believe it is appropriate for ratepayers to pay for the financing of electricity assets.

In addition, the rate-base has a different risk profile than the tax-base, which is reflected in different financing costs. Having the rate-base pay for financing of electricity system assets is not a new policy; for example Hydro One has borrowed in the capital markets since the early 2000s.

¹ Ministry of Energy, 2017 Long-Term Energy Plan

² Ministry of Energy, 2017 Long-Term Energy Plan

Formatted: Font: Italic, Underline

Formatted: Font: Italic, Underline

Formatted: No Spacing, Indent: Left: 0.63 cm

Formatted: Indent: Left: 0 cm

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province

February 2018

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible electricity consumers.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Development of OFHP

Formatted: Font: Italic, Underline

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options. Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks and take ~~necessary~~necessary actions to meet the mandate.

The senior officials and staff included:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

The government also consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed. This is normal course of business governments take for complex transactions.

Role of Ontario Power Generation (OPG)

Formatted: Font: Italic, Underline

With respect to OPG, it was identified as the Financial Services Manager (FSM) responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations. Financing requirements are determined by the legislation and will be funded through the Trust.

OPG is uniquely positioned to be the FSM, it understands the characteristics of the market, regularly interacts with the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO).

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

~~OPG will arrange for the third party debt, and supplement this funding through the Province and additional funds contributed by OPG, through increased equity in the Trust at equivalent market rates.~~

OPG also has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

OPG currently manages approximately \$20 billion in segregated nuclear funds to manage nuclear liabilities and is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience in regulatory deferral and variance accounts.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that comprises the target market for financing Ontario's Fair Hydro Plan initiative. For example, the Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors, including major investors in the Canadian power and utility bonds markets.

In terms of administration, OPG is currently managing its own corporate public debt program, three project financing programs ~~totalling~~totaling more than \$2 billion and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

As the implementation of the financing program progresses, focus has remained on minimizing costs to ratepayers. Particular attention has be given to achieving a strong credit rating for the Trust, with the objective of mitigating the impact to ratepayers through effective market pricing of the funds being borrowed by the Trust.

~~OPG is uniquely positioned to be the Financial Services Manager, understands the characteristics of the market, regularly interacts with the Ontario Energy Board (OEB) and IESO, and has experience in Treasury operations in the marketplace, including relationships with the credit rating agencies.~~

OFHP is delivering much-needed rate relief to electricity consumers. The policy decisions we have made in implementing GA refinancing, in consultation with third-party experts, senior officials and staff from across government, most effectively

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Chapter 2, Public Accounts of the Province
February 2018

achieve the policy goals of the refinancing program and ensure that the cost of important investments in the electricity system are allocated fairly amongst electricity consumers in proportion to the benefit from received from them.

OPG has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.

The total estimated cost of the program has been revised downwards substantially to reflect revised inputs, including updated long-term cost projections for the electricity system and residential bills provided by the Independent Electricity System Operator (IESO). Current government estimates forecast that the peak debt over the thirty-year life of OFHP will be approximately \$20 billion. The preliminary estimate from March 2017 was about \$28 billion.

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions. Each of these factors will need to be managed and monitored closely.

With respect to the \$4 billion figure referenced by the Financial Accountability Office (FAO), it should be noted that the report was based on the initial Ministry of Energy estimates from March 2017. The FAO simply took an estimated cost of borrowing for the Ontario Financing Authority (OFA) and OPG and applied the difference to debt estimates based on Ministry of Energy data from March.

Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

The FAO report itself concluded by saying "the FAO's estimates are subject to many assumptions and uncertainties (...) Fiscal impact may differ significantly from the FAO's estimates."

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to

further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

Commented [HS(1)]: We need a better closing section.

This is friendly questions, not sure why we're highlighting these points.

DRAFT

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**
Chapter 2 2017 Annual Report of the Auditor General
Treasury Board Secretariat, Ministry of Finance, Ministry of Energy

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including timeline)
AG Recommendation #1 <i>We recommend the government record valuation allowances to offset the net pension assets it has recorded from the Ontario Teachers' Pension Plan and the Ontario Public Sector Employees' Union Pension Plan until such time as it obtains formal written authorization from their pension plan co-sponsors that they are able to lower minimum contributions or withdraw surpluses from the pension funds within the next 12 months.</i>	The Office of the Auditor General communicated its interpretation of Public Sector Accounting Standards (PSAS) requiring a full valuation allowance on the Province's two jointly sponsored pension plans in September 2016. At that time, the government passed a time-limited regulation on the accounting treatment for its joint defined benefit plans to align with the Auditor General's interpretation of PSAS, which enabled officials from Treasury Board Secretariat and the Ministry of Finance to sign the Statement of Responsibility for the 2015-16 Public Accounts. During the 2016-17 year, the professional staff conducted further research and analysis, and determined that PSAS does not require a valuation allowance on either of the jointly sponsored pension plans. This conclusion is supported by: • The conclusions reached by an independent Pension Asset Expert Advisory Panel (the 'Panel'), established by the government to provide advice on the interpretation of PSAS with respect to the reporting of net pension assets of these two joint defined benefit plans. The Panel, comprised of accredited accounting, actuarial and legal professionals with extensive background in pension accounting and plan governance, released its report in February 2017 which supported the government's position that a valuation is not required for these two plans under PSAS. Two key findings of the Panel were: 1) there is no requirement under PSAS that any formal agreement exist between the joint sponsors regarding the timing or amount of a reduction in contributions to record an asset, as the existing agreements in place between the parties support the recognition of an expected benefit, and 2) unilateral control is not	The government will evaluate the need for a valuation allowance annually taking into consideration (a) changes, if any, in the governance structures of the plans, (b), decisions, if any, of the joint sponsors that impact the need for a valuation allowance, and (c) changes, if any, in Public Sector Accounting Standards. The government is open to continue to discuss the matter in the hopes of resolving this matter.

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**
Chapter 2 2017 Annual Report of the Auditor General
Treasury Board Secretariat, Ministry of Finance, Ministry of Energy

	required for asset recognition; joint control with each party having the ability to deny the actions of the other sponsor, provides evidence of shared control, supporting recognition of an asset. • An opinion from Deloitte LLP on aspects of the Province's accounting as at March 31, 2016 for the Ontario Teachers' Pension Plan. The opinion, which was dated October 2, 2016, concluded that it was permissible to recognize a pension asset under Canadian Public Sector Accounting Standards, even though the Province did not have under a unilateral right to reduce contributions. The opinion did not address the value at which the asset should be recorded. • Analysis completed by EY as to whether any valuation allowance is required to be recorded for OTPP or OPSEUPP as of March 31, 2017. EY confirmed no valuation allowance was required for either plan. PSAS neither requires unilateral control to record an asset, nor does it include a requirement to obtain a letter from the co-sponsor of the plan agreeing to reduce future contributions within 12 months.	

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**
Chapter 2 2017 Annual Report of the Auditor General
Treasury Board Secretariat, Ministry of Finance, Ministry of Energy

AG Recommendation #2 <i>We recommend that the government remove the Independent Electricity System Operator's Market Accounts from the Province's consolidated financial statements.</i>	The Province consolidates the entities it controls, in accordance with Public Sector Accounting Standards (PSAS) and its internal reporting policies. Each consolidated entity produces its own stand-alone financial statements and is subject to its own financial statement audit. In 2016, the Independent Electricity System Operator (IESO) changed the accounting for the market accounts and recognized these balances on its financial statements. The financial statements of the IESO for the year-ended December 31, 2016 were subject to an external audit and received an unqualified (or clean) opinion. The government supports this enhanced reporting and greater transparency for the economic activities of the IESO. Additional comments with respect to IESO's accounting for the Market Accounts are included in the response to Recommendation #5 of this report.	The government supports the enhanced reporting and greater transparency for the economic activities of IESO resulting from the recognition of the market accounts. The government is open to continue to discuss the issue in the hopes of resolving this matter.
AG Recommendation #3 <i>We recommend the government follow the accounting standards established by the Public Sector Accounting Board and the Province's historical accounting precedent, and implement the recommendations in the Special Report issued</i>	The government prepares its financial statements in accordance with PSAS. The proposed accounting for the Ontario Fair Hydro Plan reflects the economic substance of the transaction by differentiating costs borne by taxpayers versus those borne by ratepayers. PSAS is silent on the recognition, measurement, presentation and disclosure of rate-regulated activities. In absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards. This guidance for PSAS is included in PS1150.07. Regarding the Office of the Auditor General's (OAG's) recommendation that the financing for Ontario's Fair Hydro Plan (OFHP) be pursued at the lowest cost to Ontarians, the government reiterates its concerns with this characterization, which were previously provided in the October 4, 2017 government response to the OAG's special report on OFHP (see	The government intends to continue to prepare its financial statements in accordance with Public Sector Accounting Standards (PSAS). The Fair Hydro Trust will raise financing through a combination of 3rd party senior debt and subordinated debt funded by OPG for which the cost will be primarily driven by the credit ratings assigned by Moody's and DBRS. The ultimate cost of this program will be dependent on the quantity of Global Adjustment that will be financed, prevailing market interest rates over the next 30 years, the availability of capital to invest in this type of structured debt and the

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**
Chapter 2 2017 Annual Report of the Auditor General
Treasury Board Secretariat, Ministry of Finance, Ministry of Energy

<i>by our Office and tabled in the legislature on October 17, 2017, titled The Fair Hydro Plan: Concerns About Fiscal Transparency, Accountability and Value for Money, as follows:</i> <i>Record the true financial impact of the Fair Hydro Plan's electricity rate reduction on the Province's budgets and consolidated financial statements; and</i> <i>Use a financing structure to fund the rate reduction that is least costly for Ontarians.</i>	Government Response to OAG Report on the Fair Hydro Plan in Appendix 5 of the Auditor General's Special Report). With respect to the Global Adjustment Refinancing (GA Refinancing) component of the OFHP, the policy objective is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets. Therefore, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the ratepayers – and not the tax-base. The government believes it is appropriate for ratepayers to pay for the financing of electricity assets. The rate-base has a different risk profile than the tax-base, which would be reflected in different interest costs. The various entities that operate in the electricity industry have different financing costs that are specific to their risk profiles. The industry does not operate and is not financed through the Province. Ontario Power Generation (OPG) was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner. OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization program and highly successful project debt issuances tied to new hydroelectric developments. OPG is beginning the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be less than the estimates in the May 2017 report of the Financial Accountability Office (FAO). The figures referenced in the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis	credit stability of the OFHP program which would be reflected in credit ratings assigned to this debt over time. Each of these factors will need to be managed and monitored closely. The government is open to continue to discuss the issue in the hopes of resolving this matter.

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**
Chapter 2 2017 Annual Report of the Auditor General
Treasury Board Secretariat, Ministry of Finance, Ministry of Energy

	conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and the quantity of GA to be refinanced. A number of variables, including interest rates, electricity demand and electricity costs, will change over the thirty-year life of OFHP. Government will continue to revise cost estimates to reflect these variable conditions. In addition, as outlined in the 2017 Long-Term Energy Plan, the government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of GA refinancing.	
AG Recommendation #4 <i>The Office of the Auditor General is the appointed under the Auditor General Act as the auditor for the consolidated financial statements of the Province of Ontario. We recommend that the Treasury Board Secretariat:</i> <i>Proactively supply copies to the Auditor General of all contracts it enters into for accounting advice and opinions in order to ensure that</i>	Governments have the legal authority to engage external professionals on the wide range of legal, policy and financial issues that fall within their executive authority. It is also widely recognized that a government is entitled to a zone of confidentiality in which to consider this advice before any final decision is made. This is with the full understanding that ultimately the government will be accountable to the public and the Legislature for its decisions. Part of that accountability includes a commitment to full cooperation with any Officer of the Assembly legally authorized to review and comment on the government's actions, including the disclosure of any documents the officer is entitled to receive as part of his or her work. Treasury Board Secretariat's use of external expertise for accounting and financial reporting matters supplements its own resources on complex or emerging accounting and reporting matters. External advisors are generally engaged to provide advice and guidance to supplement internal analysis.	Treasury Board Secretariat will continue to take a proactive approach to raising issues with the Office of the Auditor General. Where required by the CPA Ontario Code of Professional Conduct, the Auditor General will continue to be advised of external advisor involvement.

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**
Chapter 2 2017 Annual Report of the Auditor General
Treasury Board Secretariat, Ministry of Finance, Ministry of Energy

<i>our Office is aware of the work the advisers are performing, can assess significant issues in a timely manner, and can determine the impact on the Province's consolidated financial statements and our annual audit; and</i> <i>• Build into its contracts with external advisers the requirement that the advisers engaged to provide accounting advice and opinions that affect the consolidated financial statements notify our Office of</i>	Treasury Board is committed to working with the Office of the Auditor General to discuss issues, once the professional staff has completed its analysis of the issue. In addition, Treasury Board believes frequent communication with the Office of the Auditor General is important and to that end, requested additional meetings with both the staff and the Auditor General during the 2016-17 audit. Where required by the CPA Ontario Code of Professional Conduct, the Auditor General has been, and will continue to be, advised of external advisor involvement.	

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**
Chapter 2 2017 Annual Report of the Auditor General
Treasury Board Secretariat, Ministry of Finance, Ministry of Energy

<i>their engagement as required under the Code of Professional Conduct of the Chartered Professional Accountants of Ontario.</i>		
AG Recommendation #5 <i>We recommend that the Independent Electricity System Operator (IESO), an “other government organization,” use the Canadian Public Sector Accounting Standards (PSAS) in the preparation of its financial statements. Specifically, it should:</i>	The Independent Electricity System Operator (IESO) prepares its financial statements in accordance with Public Sector Accounting Standards (PSAS) and the financial statements are audited by a firm of independent external auditors whose responsibility is to express an opinion on whether the financial statements are fairly presented in accordance with PSAS. On its 2016 financial statements, IESO received an unqualified (clean) audit opinion. In its role as market administrator, IESO operates and settles approximately \$17 billion through the electricity market. The change to include market account assets and liabilities in the financial statements provides increased transparency with respect to the value of transactions that flow through Ontario’s electricity market, that otherwise would go	The IESO intends to continue to prepare its financial statements in accordance with Public Sector Accounting Standards, and will report on the results of its accounting firm’s audit in its 2017 financial statements, to be published March 30, 2018. The IESO will continue to regularly review its accounting policies to ensure they are best suited to the reporting requirements of its business and the users of its financial statements. This includes providing transparency into the value of transactions that flow through Ontario’s \$17 billion electricity market and reflecting the economic substance of certain types of expenses that may not be directly recovered through normal revenue requirement

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**
Chapter 2 2017 Annual Report of the Auditor General
Treasury Board Secretariat, Ministry of Finance, Ministry of Energy

• <i>Remove market accounts recorded on its financial statements; and</i> • <i>Discontinue the inappropriate use of rate-regulated accounting in the preparation of its financial statements.</i> <i>To ensure that the members of the Legislative Assembly receive financial information on the operations of the IESO prepared in accordance with Canadian PSAS, the Office of the Auditor General will conduct an attest audit of the December 31, 2017, financial statements of the IESO as permitted under the Electricity Act, Subsection 25.2(2), which</i>	unreported in IESO's financial statements. These changes were extensively discussed with IESO's external auditors, its Audit Committee and its Board of Directors. The decision was supported by the Office of the Provincial Controller and IESO's external audit firm. Rate-regulated accounting better reflects the economic substance of certain types of IESO expenses (like those related to the Smart Metering Entity) that may not be directly recovered through normal revenue requirement models, and instead are recovered through rate regulation. This change is in line with accounting practices followed by six out of eight other independent system operators in North America and provides IESO financial statement users greater transparency into the substance of the variance accounts it holds and its right to collect an amount in the future.	models, and instead are recovered through rate regulation. The IESO recognizes the Auditor General's statutory role and authority to perform an audit of the IESO. The IESO is cooperating with the Office of the Auditor General to provide information, including the 2017 financial statements prepared by management, and for access to management for assistance in understanding such information. The IESO has likewise instructed its audit partner to cooperate with the Auditor General's audit.

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**
Chapter 2 2017 Annual Report of the Auditor General
Treasury Board Secretariat, Ministry of Finance, Ministry of Energy

<i>states: “The Auditor General may audit the accounts and transactions of the IESO. 2014, c. 7, Sched. 7, s. 3 (1).”</i>		
AG Recommendation #6 <i>We recommend the government follow the accounting standards established by the Public Sector Accounting Board, rather than using legislation and regulations to prescribe accounting treatments.</i>	The Province is committed to provide high-quality financial reports that support transparency and accountability in reporting to the public, the legislature and other users. For the 2015-16 Public Accounts, the government passed a time-limited regulation prescribing the accounting treatment for net pension assets in order to allow Treasury Board Secretariat and Ministry of Finance officials to sign off on Public Accounts consistent with the fiscal impact of the Auditor General’s interpretation of Public Sector Accounting Standards (PSAS). This regulation is the only example of where the accounting treatment was legislated, and the legislation did not align with the requirements of PSAS. With respect to the Ontario Fair Hydro Plan Act and its regulations, there are no provisions in that legislation that prescribe the accounting treatment required to be followed by the Province. It is important to distinguish legislating the accounting from legislating the right of the government to recover amounts from specified ratepayers in the future,	The government intends to continue to prepare its financial statements in accordance with Public Sector Accounting Standards.

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**
Chapter 2 2017 Annual Report of the Auditor General
Treasury Board Secretariat, Ministry of Finance, Ministry of Energy

	which in the absence of the legislation, would have been collected from specified ratepayers as the costs were incurred. The accounting for the transactions resulting from the Fair Hydro Plan will be recorded in accordance with PSAS.	
AG Recommendation #7 <i>We recommend that in order to address the Province's growing total debt burden, the government work towards the development of a long-term total-debt reduction plan linked to its target of reducing the net debt-to-GDP ratio to its pre-recession level of 27% as measured using proper accounting for net pension assets and the projected costs of the Fair Hydro Plan. The government should also discuss publicly how it plans to pay down the debt.</i>	The 2017 Budget and the 2017 Fall Economic Statement stated that the government continues to maintain a target of reducing the net debt-to-GDP ratio to its pre-recession level of 27%. The government is making strategic investments in programs and services that will generate economic growth, while minimizing interest on debt costs. These investments are intended to grow the economy at a faster rate than net debt, allowing the government to manage Ontario's net debt-to-GDP ratio. The forecast balanced budget in 2017–18 will limit the increase in net debt to net investments in capital assets. The government's long-term infrastructure plan to invest about \$190 billion over 13 years, starting in 2014-15, will contribute to the growth of the economy. The Centre for Spatial Economics found that for every \$1 spent on public infrastructure, GDP increases by \$6, on average, in the long term. Therefore, while overall debt will rise to fund these infrastructure investments, measurements of relative debt such as the net debt-to-GDP ratio, a recommended practice by the Public Sector Accounting Board, will gradually diminish due to the Province's GDP increasing at a faster rate than net debt. This will allow the Government to continue to move towards	Continue to monitor progress.

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**
Chapter 2 2017 Annual Report of the Auditor General
Treasury Board Secretariat, Ministry of Finance, Ministry of Energy

	its 27% net debt-to-GDP target. The ratio has already commenced declining from its 2014-15 peak of 39.3%. As discussed more thoroughly in responses to other recommendations in this report, the government prepares its financial statements in accordance with Public Sector Accounting Standards, including the net pension assets for its jointly sponsored pension plans and the transactions resulting from the Ontario Fair Hydro Plan.	
AG Recommendation #8 <i>We recommend that the Office of the Provincial Controller undertake thorough planning involving all stakeholders, including Treasury Board Secretariat, ministries and provincial government agencies, to identify the barriers and key areas to be addressed to achieve earlier finalization of the Province's consolidated financial statements, including the estimation risks associated with corporations tax and</i>	Treasury Board Secretariat and the Ministry of Finance are supportive of the timely delivery of the Public Accounts. The Office of the Provincial Controller works closely with the Office of the Auditor General to identify audit issues early and to ensure that stakeholders are engaged in discussions regarding risks and resolution. The Office of the Provincial Controller will continue to collaborate with the Office of the Auditor General to support the timely delivery of the Public Accounts. The Province will work with the Canada Revenue Agency on this recommendation, as reporting Personal and Corporate taxation revenues is highly dependent on information they provide.	Planning discussions for the 2017-18 Public Accounts have begun between the Office of the Provincial Controller and the Office of the Auditor General. As well, the Office of Economic Policy has been engaged in discussions on risk considerations related to economic models used to estimate personal and corporate tax revenues.

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**
Chapter 2 2017 Annual Report of the Auditor General
Treasury Board Secretariat, Ministry of Finance, Ministry of Energy

<i>personal income tax revenues.</i>		
AG Recommendation #9 <i>We recommend that the government avoid establishing arm's length trusts in order to record an expense in its consolidated financial statements before it is necessary, given that it loses the ability to ensure that funds are ultimately provided to the appropriate beneficiaries.</i>	The government works with its transfer payment recipients to ensure it receives good value for the money it provides in the form of grants. Government policy on the structured approach to program delivery takes a risk-based approach with respect to transfer payment oversight. Grants are provided to thousands of organizations annually that the government deals with at arms-length and is able to demonstrate proper oversight. A Trust structure was selected to implement the Affordability Fund in order to provide an effective solution to distributing funds to electricity distributors. With approximately 70 distributors across Ontario, it was not feasible for the Province to enter into agreements with each distributor. The Trust structure establishes an independent entity with expertise from the electricity distributor and community sectors. While the Affordability Fund was established at arm's length to the government, there are report-back requirements on the use of funds transferred as well as the ability for the government to conduct an audit to gain assurance that the funds have been used for the purposes intended.	The government will continue to assess the most appropriate vehicle for meeting its policy objectives, which include appropriate oversight of how transfer payments are spent.
AG Recommendation #10 <i>We recommend that the government determine</i>	Under the <i>Fiscal Transparency and Accountability Act</i>, 2004, in such circumstances as may be prescribed by regulation, the government shall release a Pre-Election Report on Ontario's Finances and shall do so before the deadline established by regulation. Should the government file such a regulation, the Auditor General would be	The government remains committed to meeting the legislative requirements of the Act and working constructively with the Office of the Auditor General.

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**
Chapter 2 2017 Annual Report of the Auditor General
Treasury Board Secretariat, Ministry of Finance, Ministry of Energy

<i>when it will issue a regulation as outlined under subsection 11(1) of the Fiscal Transparency and Accountability Act, 2004 confirming the source of reference for the Pre-Election Report and the timeline for issuance of the report that will be subject to our review under the Act.</i>	required to promptly review the Pre-Election Report to determine whether it is reasonable and issue a Statement describing the results of the review. Staff of Treasury Board Secretariat and the Ministry of Finance have begun working with their colleagues in the Office of the Auditor General of Ontario to engage in planning and preparatory work for the development and review of a Pre-Election report, should a regulation be filed.	

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
AG Recommendation #1 <i>To ensure that ratepayers' interests are protected and that recommendations made by the Ontario Energy Board Market Surveillance Panel to improve market rules are addressed, we recommend that the Independent Electricity System Operator (IESO):</i> <i>Implement the Ontario Energy Board Market Surveillance Panel's (OEB Panel) recommendations in an effective and timely way; and</i> <i>Where the OEB Panel submits a report to the Independent Electricity System Operator that contains recommendations relating to the misuse, abuse or possible abuse of market power, the IESO should use its authority to amend the market rule immediately and submit it to the Ontario Energy Board for its review.</i>	<u>2017 Annual Report – Response:</u> The IESO supports the OEB Panel's work and acknowledges the recommendation made by the Auditor General. The IESO carefully considers every OEB Panel recommendation and the OEB Panel's underpinning analysis, and responds to each recommendation outlining the actions it will take in a letter directed to the Chair and CEO of the Ontario Energy Board. The IESO has acted on a number of the recommendations made by the OEB Panel in the past and has made a number of market rule amendments as a result. The IESO will further continue to analyze and assess OEB Panel recommendations and consider possible amendments to market rules to address those recommendations, while also balancing the need to ensure the reliability of the electricity network, to consider the impact upon market design, including potential unintended adverse effects, and to assess the ability of the IESO and market participants to implement the change. Where the OEB Panel submits a report to the IESO that contains recommendations related to market power, the IESO will take the action required of it under the Electricity Act, 1998, including amending the market rules where so ordered by the Board. <u>Status Update:</u> The Independent Electricity System Operator (IESO) considers every OEB Panel recommendation and the Ontario Energy Board (OEB) Market Surveillance Panel's (MSP) underpinning analysis. The IESO has acted on a number of the recommendations made by the OEB's MSP in the past and has made a number of market rule amendments as a result.	The Independent Electricity System Operator (IESO) will continue to analyze and assess the Ontario Energy Board's (OEB) Market Surveillance Panel (MSP) recommendations and consider possible amendments to market rules to address those recommendations, while also balancing the need to ensure the reliability of the electricity network, to consider the impact upon market design, including potential unintended adverse effects, and to assess the ability of the IESO and market participants to implement the change.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
	When the OEB's MSP issues recommendations, usually through its semi-annual monitoring reports, the IESO assesses those recommendations, recognizing the need to ensure the reliability of the electricity network, to consider the impact upon market design, including potential unintended adverse effects, and to assess the ability of the IESO and market participants to implement the change. Should the OEB's MSP submit a report that contains recommendations related to market power, the IESO will take the action required of it under the Electricity Act, 1998, including amending the market rules where so ordered by the Board.	
AG Recommendation #2 <i>To ensure that ratepayers' interests are protected and that recommendations made by the Ontario Energy Board Market Surveillance Panel (OEB Panel) to improve market rules are addressed, we recommend that the Ontario Energy Board (OEB) use its legislative authority to revoke and refer a market rule amendment back to the Independent Electricity System Operator (IESO) for further consideration when the OEB's review determines that an amendment to the market rule is not in the best interest of ratepayers, having regard to</i>	<u>2017 Annual Report – Response:</u> The Ontario Energy Board (OEB) agrees with the importance that the Auditor General attaches to outcomes that are in the best interests of ratepayers. The OEB supports the recommendations of its OEB Panel, and will continue to use the tools at its disposal to signal that support while respecting its own mandate and processes and the authority and responsibilities of other agencies. Since 2011, the OEB has regularly corresponded with the IESO regarding the recommendations the OEB Panel makes in its reports. When the OEB renewed the IESO's licence in 2013, a new licence condition was included that requires the IESO to make annual filings to the OEB on the status of actions taken further to recommendations in OEB Panel reports, including the rationale for not taking action where a recommendation remains outstanding.	As and when market rule amendments are made by the Independent Electricity System Operator (IESO) and filed with the Ontario Energy Board (OEB), the OEB will continue to exercise its existing authority in an independent manner and with due regard to the criteria for assessing market rule amendments as set out in the Electricity Act, 1998. Steps are being taken to further engage the IESO in respect of outstanding Market Surveillance Panel (MSP) recommendations on a timely basis. To the extent that the MSP questions the sufficiency or clarity of the IESO's response to an MSP recommendation, whether in correspondence with the OEB following release of an MSP report or in the IESO's annual filing, the MSP will follow up with the IESO rather than commenting on the response only in the next available semi-annual monitoring report as is currently the practice.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
<i>the fact that it does not address the Market Surveillance Panel's recommendations. The OEB should continue to revoke and refer such a market rule amendment back to the IESO until it is satisfied that the market rule amendment is in the best interest of ratepayers.</i>	The OEB will continue to work with the IESO to ensure that high-priority recommendations made by the OEB Panel are appropriately addressed in a timely manner. <u>Status Update:</u> See Outstanding Undertakings for additional information	The OEB will undertake additional follow-up as appropriate in the event that substantial outstanding issues remain after the initial outreach by the MSP.
AG Recommendation #3 <i>To ensure that ratepayers' interests are protected and that recommendations made by the Ontario Energy Board Market Surveillance Panel (OEB Panel) to improve market rules are addressed, we recommend that the Ministry of Energy review the legislative power and authority of the Ontario Energy Board to conduct a review of a market rule on its own motion, and to consider expanding its authority under the Electricity Act, 1998, when misuse and abuse of a market rule is brought forward by the OEB Panel and is not effectively being addressed by the Independent Electricity System Operator (IESO).</i>	<u>2017 Annual Report – Response:</u> The Ministry of Energy supports the Ontario Energy Board (OEB) and the IESO in the important roles they play to ensure that Ontario's electricity market operates efficiently. The Ministry, in consultation with both the OEB and the IESO, will review the Electricity Act, 1998, regarding the market rule approval process. The Ministry will also review the authority of the OEB. <u>Status Update:</u> See Outstanding Undertakings for additional information	The Ministry of Energy is committed to strong electricity market oversight in Ontario and is working closely with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB) in reviewing the appropriate role and legislative authority of the OEB with regards to the review and amendment of market rules. This review is expected to be completed this year.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
AG Recommendation #4 <i>To ensure the transparency of government decisions, we recommend that the Ministry of Energy review the impact of the Industrial Conservation Initiative on low-energy consuming ratepayers and publicly report this information.</i>	<u>2017 Annual Report – Response:</u> The Ministry continues to monitor the impact of the Industrial Conservation Initiative (ICI) on the electricity system in reducing peak demand and the impact on all classes of electricity consumers. The recovery mechanism under ICI maintains the relationship between a consumer's electricity costs and their contribution to provincial peak demand. Lowered peak demand reduces the need for supply resources and ultimately the projection for electricity system cost. The Independent Electricity System Operator (IESO) estimates that ICI reduced peak demand by about 1,300 megawatts in 2016. ICI supports a fair cost allocation framework where consumers who are contributing the least to peak demand pay a smaller portion of these related long-run costs. It is also worth noting that the IESO publishes on its website the allocation of global- adjustment costs each month, as well as the consumption for each class of consumer. The Ministry would also like to clarify that the benefit for residential and small-business consumers will not be influenced by ICI expansion. The Ontario Fair Hydro Plan reduced electricity bills for residential consumers by an average of 25% and will hold any increases to the rate of inflation for four years. <u>Status Update:</u> See Outstanding Undertakings for additional information	The Industrial Conservation Initiative (ICI) program has been successful at reducing peak electricity demand, which benefits the system by reducing the need for peaking generation. This puts downward pressure on electricity system costs as we move forward, helping to ensure a more cost-effective system for all ratepayers. The Ministry of Energy continues to monitor and report on the impact of the ICI program on the electricity system, including reductions in peak demand and impacts on all classes of electricity consumers. The results of the ICI program can be seen in monthly Independent Electricity System Operator (IESO) reports and the quarterly Ontario Energy Report.

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
AG Recommendation #5 <i>To protect ratepayers' interests and to improve the transparency of the decisions of the Independent Electricity System Operator (IESO), we recommend that the IESO provide a detailed analysis to the Ontario Energy Board Market Surveillance Panel (OEB Panel) to support its assertion that the Standby Cost Recovery Program is necessary to ensure a reliable supply of electricity for Ontarians.</i>	<u>2017 Annual Report – Response:</u> In 2018, the IESO will present to the OEB Panel a detailed analysis supporting the rationale for its previous assertions to the OEB Panel that a real-time generator commitment mechanism (currently the Real-Time Generator Cost Guarantee Program, referred to in this report as the Standby Cost Recovery Program) is necessary to allow the IESO to comply with North American power system reliability standards and ensure a reliable supply of electricity for Ontarians. <u>Status Update:</u> The Independent Electricity System Operator (IESO) is scheduled to meet with the Ontario Energy Board's Market Surveillance Place (MSP) on April 5, 2018 to present a detailed analysis supporting the rationale for maintaining a real-time generator commitment mechanism.	The Independent Electricity System Operator (IESO) is making fundamental changes to the electricity market, through the Market Renewal Program, that will include replacing the current real-time generator commitment mechanisms with a more efficient and transparent form of unit commitment. Until fundamental changes can be made, the current program is necessary to maintain the reliability of our electricity system and comply with mandatory continent-wide power system reliability standards.
AG Recommendation #6 <i>To ensure that ratepayers are not charged for unnecessary costs, we recommend that, if the Independent Electricity System Operator does not cancel the Standby Cost Recovery Program, it fully implement the Ontario Energy Board Market Surveillance Panel's (OEB Panel) recommendations</i>	<u>2017 Annual Report – Response:</u> The IESO acknowledges the recommendation made by the Auditor General and notes that the total costs of the Real-Time Generator Cost Guarantee Program (referred to in this report as the Standby Cost Recovery Program) have fallen from \$61 million in 2014 to \$23 million in 2016. In light of OEB Panel recommendations, the IESO implemented a new cost recovery framework for this Program on August 1, 2017. Under this new framework, the values for 14 of 15 eligible costs are now set and approved in advance of participating in the Program for each program participant. This change introduced transparency and removed the potential for overpayments and the	The Independent Electricity System Operator (IESO) is making fundamental changes to the electricity market, through the Market Renewal Program, that will include replacing the current real-time generator commitment mechanisms with a more efficient and transparent form of unit commitment.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
<i>and not reimburse generators for operating and maintenance costs under the Program.</i>	need for after-the-fact audits for these components. One cost component is still subject to audit, as it cannot be pre-approved, but this cost component was not identified as an issue in the Standby Cost Recovery Program audits. The IESO acknowledges issues with the current Standby Cost Recovery Program in our responses to previous OEB Panel reports and has committed to replace it. The IESO has initiated a \$200-million comprehensive program to fundamentally overhaul Ontario's electricity market. Market Renewal is estimated to result in up to \$5.2 billion in savings, the majority of which is estimated to be realized by ratepayers (see "The Future of Ontario's Electricity Market, A Benefits Case Assessment of the Market Renewal Project," http://www.ieso.ca/-/media/files/ieso/document-library/engage/me/benefits-case-assessment-market-renewal-project-clean-20170420.pdf?la=en and http://www.ieso.ca/sector-participants). The Enhanced Real-Time Unit Commitment initiative of Market Renewal will replace the current Standby Cost Recovery Program with a transparent and competitive mechanism that will ensure reliability through a more efficient commitment of resources near real time. <u>Status Update:</u> In light of Ontario Energy Board's Market Surveillance Panel (MSP) recommendations, the Independent Electricity System Operator (IESO) implemented a new cost recovery framework for this Program on August 1, 2017. Under this framework, eligible costs are set and approved in advance of participating in the Program for each program	

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
	participant. Program costs have fallen from \$61 million in 2014 to \$22 million in 2017.	
AG Recommendation #7 <i>To ensure that ratepayers are not charged for unnecessary costs associated with the Lost Profit Recovery Program, we recommend that the Independent Electricity System Operator (IESO) implement the recommendations of the Ontario Energy Board Market Surveillance Panel (OEB Panel) regarding this Program.</i>	<u>2017 Annual Report – Response:</u> The IESO acknowledges the recommendation made by the Auditor General and carefully considers every OEB Panel recommendation and the OEB Panel's underpinning analysis, and responds to each recommendation outlining the actions it will take in a letter directed to the Chair and CEO of the OEB. The IESO has acted on a number of the recommendations made by the OEB Panel related to Congestion Management Settlement Credits (referred to in this report as the Lost Profit Recovery Program) and has implemented more than a dozen market rule amendments regarding the Program. In light of the recommendations made by the OEB Panel over the years, the IESO will continue to consider the OEB Panel recommendations when assessing amendments to market rules while also balancing the need to ensure the reliability of the electricity network, to consider the impact upon market design including potential unintended adverse effects and to assess the ability of the IESO and market participants to implement the change. The IESO has initiated a \$200-million comprehensive program to fundamentally overhaul Ontario's electricity market. Market Renewal is estimated to result in up to \$5.2 billion in savings, the majority of which is estimated to be realized by ratepayers (see "The Future of Ontario's Electricity Market, A Benefits Case Assessment of the Market Renewal Project," http://www.ieso.ca/-/media/files/ieso/document-library/engage/me/benefitscase-assessment-market-renewal-project-clean-20170420.pdf?la=en and http://www.ieso.ca/sector-participants).	The Independent Electricity System Operator (IESO) has introduced fundamental changes through the Market Renewal Program that would eliminate the need for CMSC through the Single Schedule Market (SSM). The IESO has initiated a \$200 million comprehensive program to fundamentally overhaul Ontario's electricity market. Market Renewal is estimated to result in up to \$5.2 billion in savings, the majority of which is estimated to be realized by ratepayers (see "The Future of Ontario's Electricity Market, A Benefits Case Assessment of the Market Renewal Project," http://www.ieso.ca/-/media/files/ieso/document-library/engage/me/benefitscase-assessment-market-renewal-project-clean-20170420.pdf?la=en and http://www.ieso.ca/sector-participants). The Single Schedule Market (SSM) initiative of Market Renewal will eliminate the Lost Profit Recovery Program.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
	www.ieso.ca/sector-participants). The Single Schedule Market (SSM) initiative of Market Renewal will eliminate the Lost Profit Recovery Program. <u>Status Update:</u> The Independent Electricity System Operator (IESO) has acted on a number of the recommendations made by the Ontario Energy Board's Market Surveillance Panel (MSP) related to Congestion Management Settlement Credits (referred to in this report as the Lost Profit Recovery Program) and has implemented more than a dozen market rule amendments regarding the Program. A December 2016 MSP report noted: "many of the most problematic issues associated with the CMSC regime have been brought to an end – in large measure as a result of the Panel having identified these situations, and the IESO having acted to eliminate them."	
AG Recommendation #8 <i>To ensure that the Market Renewal Initiative (Initiative) considers and protects all ratepayers' interests, we recommend that the Independent Electricity System Operator (IESO):</i> <i>immediately prohibit representatives from companies that have been found by the Ontario Energy Board Market</i>	<u>2017 Annual Report – Response:</u> The IESO acknowledges the recommendations of the Auditor General and will continue to evaluate the membership of the working groups used for Market Renewal. The IESO will also continue to ensure that its stakeholder engagement processes, including Market Renewal, seek representation from low-volume consumers where appropriate. The IESO's stakeholder engagement processes seek the input from a wide representation of participants—generators, traders, consumers, stakeholders, First Nations and Metis Peoples, communities, and the general public—and are guided by seven engagement principles that were put in place in November 2015 (see http://www.ieso.ca/sector-	The Independent Electricity System Operator (IESO) will complete a general review of its engagement strategy. The IESO expects to communicate and implement updates to its engagement strategy by Q3 2018. The engagement strategy will continue to be aligned with the IESO engagement principles and ensure wide representation from our market participants, sector stakeholders and other stakeholders such as low volume consumers.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
<i>Surveillance Panel or the IESO Oversight Division to have misused IESO programs from participating in the Initiative working group;</i> <i>establish a minimum number of working group members representing low-power consumers and ensure that those positions are always filled; and</i> <i>publicly report in clear language how the results of the Initiative will be in the best interests of all ratepayers.</i>	participants/ engagement-initiatives/overview/ engagement-principles). One of the principles, which applies to Market Renewal, seeks to ensure adequate representation in each engagement of the public or those that have a tendency to remain silent or reluctant to engage. Where practical, a variety of engagement methods will be offered to provide flexibility to participate. The IESO is also required by statute (the Electricity Act, 1998, S.O. 1998, c. 15, Sched. A, s. 188) to have a Stakeholder Advisory Committee that provides appointed stakeholder representatives with the opportunity to present advice and recommendations on key initiatives like Market Renewal directly to the IESO's independent Board of Directors and Leadership Team. Members include low-volume consumers (see http://www.ieso.ca/-/media/files/ieso/document-library/sac/sac_tor.pdf). <u>Status Update:</u> In December 2017, a member representing low volume consumers was added to the Market Renewal Working Group (MRWG). The Independent Electricity System Operator (IESO) will continue to ensure that its stakeholder engagement processes, including Market Renewal, seeks broad, all-inclusive representation.	

Summary Status Table in Response to the Report of the Auditor General of Ontario

Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
AG Recommendation #9 <i>To ensure that the Independent Electricity System Operator (IESO) Market Assessment and Compliance Division can conduct proper oversight of the market, we recommend that the IESO:</i> • <i>assess the resources needed to eliminate its investigation backlog and conduct the large-scale investigations that have proven effective in recovering funds and identifying and sanctioning significant rule violations; and</i> • <i>attract and retain staff with experience in market rules and expertise in investigation.</i>	<u>2017 Annual Report – Response:</u> The IESO agrees with the Auditor General's recommendation, as it is consistent with recent increases in staff at the Oversight Division and the process of ongoing review of priorities. As part of the IESO Business Planning process for 2018, the IESO is evaluating the risk profile of a variety of its priorities, including the enforcement of market rules. As part of this exercise, consideration is being undertaken to both increase the total level of resources made available for enforcement, as well as the conversion of some current resources to full-time and non-temporary staff. In doing so, attracting staff with expertise in market rules and investigations will be a priority. <u>Status Update:</u> See Outstanding Undertakings for additional information	The Market Assessment and Compliance Division (MACD) will complete a risk and resourcing assessment in the first quarter of 2018 to identify opportunities to convert contracted staff to regular (i.e., full-time and non-temporary) status and increase the total level of resources to the enforcement and oversight functions.
AG Recommendation #10 <i>To enable the Independent Electricity System Operator Market Assessment and Compliance Division (Oversight Division) to conduct thorough and effective investigations, we recommend</i>	<u>2017 Annual Report – Response:</u> The Ministry supports the vital roles that the Oversight Division plays in investigating potential infractions in Ontario's electricity system. To ensure that the Oversight Division can effectively conduct its investigations, the Ministry will consult with Independent Electricity System Operator regarding the potential need for additional	The Ministry of Energy is committed to strong electricity market oversight in Ontario, and is working closely with the Independent Electricity System Operator (IESO) in reviewing the appropriate role and legislative authority of Market Assessment and Compliance Division (MACD) regarding oversight of Ontario's electricity market, in order to ensure effective and efficient investigations into instances of potential abuse of the market rules.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
<i>that the Ministry of Energy give the Oversight Division explicit legislative authority under the Electricity Act to compel information and evidence in the course of its investigations.</i>	legislative authority to assist the Oversight Division in performing its mandated duties. <u>Status Update:</u> See Outstanding Undertakings for additional information	
AG Recommendation #11 <i>To ensure that the Independent Electricity System Operator (IESO) Market Assessment and Compliance Division (Oversight Division) can conduct proper oversight of the market, we recommend that the IESO replace the Oversight Division's computer system as soon as possible.</i>	<u>2017 Annual Report – Response:</u> As part of the IESO Business Planning process for 2018, the IESO is evaluating the risk profile of a variety of its priorities, including the sufficiency of resources directed towards the Oversight Division's IT support and replacement of the computer system. <u>Status Update:</u> Substantial technical support has been provided to the Market Assessment and Oversight Division (MACD) to enable the development of technical business requirements geared towards an enforcement support tool. The MACD is now using a proposed tool on a pilot basis for case management and using industry-standard litigation and evidence management tools to support its current cases.	Market Assessment and Compliance Division (MACD) expects to complete its internal assessment, including user acceptance testing and full implementation of the proposed enforcement support tool by Q2 2018.
AG Recommendation #12 <i>To strengthen the independence of the Independent Electricity System Operator (IESO) Market Assessment and Compliance Division (Oversight Division), we recommend that the IESO</i>	<u>2017 Annual Report – Response:</u> The IESO agrees with the Auditor General's recommendation. The IESO's independent Board of Directors approved in October 2017 a new reporting structure whereby the Director of the Oversight Division will report directly to the IESO Board of Directors and report only administratively to the IESO CEO.	The Independent Electricity System Operator (IESO) has completed all actions to address the recommendation.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
<i>change the Oversight Division's reporting structure.</i>	<u>Status Update:</u> Prior to the release of the Auditor's report, the Independent Electricity System Operator (IESO) completed implementing a new reporting structure whereby the Director of the Oversight Division reports directly to the IESO Board of Directors and reports only administratively to the IESO CEO.	
AG Recommendation #13 <i>To strengthen its cybersecurity governance, we recommend that the Independent Electricity System Operator (IESO) create a senior-level position for cybersecurity and establish a formal reporting process to both IESO executives and the IESO Board of Directors.</i>	<u>2017 Annual Report – Response:</u> The IESO agrees with the Auditor General's recommendation. The IESO is already in the process of recruiting a new Chief Information Officer (CIO) with an increased focus on cybersecurity, and will consider creating a senior-level position for cybersecurity with formal reporting to both IESO executives and the IESO independent Board of Directors. <u>Status Update:</u> Prior to the release of the Auditor's report, the Independent Electricity System Operator (IESO) had initiated a recruitment process for a Chief Information Officer (CIO), with an increased focus on cybersecurity. Based on the senior-level nature of the role, the successful candidate in the CIO position will be an experienced senior technology executive, who has a deep understanding of Critical Infrastructure Protection environments, like the IESO, and demonstrated experience in overseeing enterprise-wide cybersecurity management programs.	Target date for appointment of Chief Information Officer (CIO) is by end of Q1 2018. The Independent Electricity System Operator (IESO) is also looking to establish a senior-level position for cybersecurity, reporting to the CIO, who will be responsible for the delivery and operations of the IESO's cybersecurity program. The timing of the senior-level cybersecurity role is targeting Q1 2018.

Summary Status Table in Response to the Report of the Auditor General of Ontario

Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
	The CIO will have cross-organizational influence to ensure that cybersecurity risk management is being addressed and integrated across all business units of the organization. The CIO will report to the IESO's Chief Executive Officer. This was an internal governance decision, made by the IESO's executive in collaboration with the board.	
AG Recommendation #14 <i>To ensure there are sufficient cybersecurity resources in place to respond to cyberattacks, we recommend that the Independent Electricity System Operator (IESO) increase the number of cybersecurity staff to the recommended level of seven and/or engage an external IT cybersecurity vendor to be on standby.</i>	<u>2017 Annual Report – Response:</u> The IESO complies with all applicable North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection standards, which include standards for cybersecurity. The IESO is in the process of implementing an independent consultant's recommendation to increase the number of current cybersecurity staff in a manner consistent with the Auditor General's recommendation. The IESO has also retained the services of a cybersecurity vendor to augment the existing staff in the event of a cybersecurity event. The IESO is also an active member of the North American Cybersecurity Mutual Assistance Program (CMA), which provides access to cybersecurity specialists from over 150 North American utilities in the event of a cyberincident. <u>Status Update:</u> Prior to the release of the Auditor's report, the Independent Electricity System Operator (IESO) had started implementing an independent consultant's recommendation to increase the number of current cybersecurity staff, which is consistent with the Auditor General's recommendation.	The Independent Electricity System Operator (IESO) has also launched a competitive process to retain a cybersecurity third-party vendor that will, in conjunction with IESO staff, provide a robust security operations center (SOC) enabling 24/7/365 real-time cybersecurity monitoring.

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
	The IESO has retained the services of a cybersecurity vendor to augment the existing staff in the event of a major cybersecurity event.	
AG Recommendation #15 <i>To reduce cybersecurity risk and to prevent potential costly IT project redesigns, we recommend that the IT department of the Independent Electricity System Operator (IESO) involve its cybersecurity staff in the early stages of all IT projects that could pose cybersecurity risks.</i>	<u>2017 Annual Report – Response:</u> The IESO complies with all applicable North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection standards, which include standards for cybersecurity. It is the IESO's current practice that security risk assessments are incorporated in the IT project management practices. Having said that, the IESO will continue to enhance its approach to ensure "cybersecurity by design" in all of its IT-related projects. That means ensuring that the cybersecurity requirements are being considered early in the process of any new IT program design and that sufficient cybersecurity staff are allocated at this important part of any project. This will be further facilitated by the formation of the IESO's new Program Management Office, which will ensure an enterprise-holistic view on all IESO projects. <u>Status Update:</u> The Independent Electricity System Operator's (IESO) new Project Management Office was formed in Q4 2017.	The incoming Chief Information Officer (CIO) and senior-level cybersecurity resource (as referenced in the Independent Electricity System Operator (IESO) responses to recommendation #13) will establish effective governance ensuring that security practices are being built-in to the IESO's project management program and individual IT project lifecycles. The IESO will also be developing a best practice guide for the sector on cybersecurity risks in the supply chain. This would be applicable to the vendor supply chain that delivers industrial control system hardware, software, and computing and networking services associated with not only the bulk system operations, but traditional enterprise environments. The best practice guide is expected to be in place by the end of 2018.
AG Recommendation #16 <i>To reduce the cybersecurity risk of the Independent Electricity System Operator (IESO), we recommend that</i>	<u>2017 Annual Report – Response:</u> The IESO agrees with the Auditor General's recommendation. The IESO complies with all applicable North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection standards, which include standards for cybersecurity. The IESO has procured	The Independent Electricity System Operator (IESO) is currently making minor refinements to the Advanced Malware system, and the project is intended to be implemented by the end of Q1 2018.

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
<i>the IESO procure technology that prevents and identifies breaches of confidential information and monitors staff access to confidential information in real time.</i>	technology that prevents and identifies breaches of confidential information and monitors staff access to confidential information in real time through the Advanced Malware project, and is implementing that technology now, with a target completion date of the end of the fourth quarter of the 2017 fiscal year. <u>Status Update:</u> The Independent Electricity System Operator (IESO) has procured robust detection technology that has the ability to not only identify unusual activity that could lead to breaches of confidential information, but also malicious activity that could compromise the integrity of the IESO IT environments. Through the delivery of the Advanced Malware project, the detection technology is now in place, and in addition, all objectives identified in the business case for the project were met in 2017.	
AG Recommendation #17 <i>To reduce the cybersecurity risk of the Independent Electricity System Operator (IESO), we recommend that:</i> <i>the IESO establish an external vendor cybersecurity policy; and</i> <i>the cybersecurity team conduct a regular assessment of the</i>	<u>2017 Annual Report – Response:</u> The IESO complies with all applicable North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection standards, which include standards for cybersecurity. The cybersecurity team works directly with the procurement and legal processes to ensure security requirements are met. The IESO was an active participant in the development of the NERC Supply Chain risk standards, and is in the process of developing and implementing supply chain risk management measures to comply with these standards, which will also include processes that are responsive to the recommendation.	The Independent Electricity System Operator (IESO) is in the process of developing and implementing supply chain risk management measures that comply with North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection Supply Chain risk standards, which will also include processes that are responsive to the recommendation. The IESO is expanding its cybersecurity governance framework over the next two to three years to meet the National Institute of Standards and Technology (NIST) Cybersecurity framework that will help assess and mitigate vendor risks to the supply chain. This framework will

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
<i>security risk that external vendors pose to the IESO.</i>	<u>Status Update:</u> On an ongoing basis, the Independent Electricity System Operator's (IESO) cybersecurity team works directly with the procurement and legal processes to ensure security requirements are met.	establish effective security governance around external vendors. The plan associated with this will be developed by the end of 2018. As identified, the IESO will also be developing a best practice guide for the sector on cybersecurity risks in the supply chain; the guide is expected to be in place by the end of 2018.
AG Recommendation #18 <i>To ensure that backup tapes are adequately protected and available when needed, we recommend that the Independent Electricity System Operator (IESO):</i> • <i>properly encrypt all backup tapes; and</i> • <i>store them in a secure off-site location.</i>	<u>2017 Annual Report – Response:</u> The IESO complies with all applicable North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection standards, which include standards for cybersecurity. Access to backup tapes is tightly controlled both in on-site and off-site storage. The IESO will investigate the feasibility of storing all backup tapes off-site and of further protecting backup tapes with encryption. The IESO does not rely on backup tapes as a primary recovery mechanism as all of our critical systems are high availability and site redundant through our Backup Data Centre. <u>Status Update:</u> The Independent Electricity System Operator (IESO) has eliminated the use of tape-based backups in favour of system and data redundancy across two highly available and redundant data centers.	The Independent Electricity System Operator (IESO) has completed all actions to address the recommendation.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
AG Recommendation #1 <i>To ensure that ratepayers' interests are protected and that recommendations made by the Ontario Energy Board Market Surveillance Panel to improve market rules are addressed, we recommend that the Independent Electricity System Operator (IESO):</i> • <i>Implement the Ontario Energy Board Market Surveillance Panel's (OEB Panel) recommendations in an effective and timely way; and</i> • <i>Where the OEB Panel submits a report to the Independent Electricity System Operator that contains recommendations relating to the misuse, abuse or possible abuse of market power, the IESO should use its authority to amend the market rule immediately and submit it to the Ontario Energy Board for its review.</i>	<u>2017 Annual Report – Response:</u> The IESO supports the OEB Panel's work and acknowledges the recommendation made by the Auditor General. The IESO carefully considers every OEB Panel recommendation and the OEB Panel's underpinning analysis, and responds to each recommendation outlining the actions it will take in a letter directed to the Chair and CEO of the Ontario Energy Board. The IESO has acted on a number of the recommendations made by the OEB Panel in the past and has made a number of market rule amendments as a result. The IESO will further continue to analyze and assess OEB Panel recommendations and consider possible amendments to market rules to address those recommendations, while also balancing the need to ensure the reliability of the electricity network, to consider the impact upon market design, including potential unintended adverse effects, and to assess the ability of the IESO and market participants to implement the change. Where the OEB Panel submits a report to the IESO that contains recommendations related to market power, the IESO will take the action required of it under the Electricity Act, 1998, including amending the market rules where so ordered by the Board. <u>Status Update:</u> The Independent Electricity System Operator (IESO) considers every OEB Panel recommendation and the Ontario Energy Board (OEB) Market Surveillance Panel's (MSP) underpinning analysis. The IESO has acted on a number of the recommendations made by the OEB's MSP in the past and has made a number of market rule amendments as a result.	The Independent Electricity System Operator (IESO) will continue to analyze and assess the Ontario Energy Board's (OEB) Market Surveillance Panel (MSP) recommendations and consider possible amendments to market rules to address those recommendations, while also balancing the need to ensure the reliability of the electricity network, to consider the impact upon market design, including potential unintended adverse effects, and to assess the ability of the IESO and market participants to implement the change.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
	When the OEB's MSP issues recommendations, usually through its semi-annual monitoring reports, the IESO assesses those recommendations, recognizing the need to ensure the reliability of the electricity network, to consider the impact upon market design, including potential unintended adverse effects, and to assess the ability of the IESO and market participants to implement the change. Should the OEB's MSP submit a report that contains recommendations related to market power, the IESO will take the action required of it under the Electricity Act, 1998, including amending the market rules where so ordered by the Board.	
AG Recommendation #2 <i>To ensure that ratepayers' interests are protected and that recommendations made by the Ontario Energy Board Market Surveillance Panel (OEB Panel) to improve market rules are addressed, we recommend that the Ontario Energy Board (OEB) use its legislative authority to revoke and refer a market rule amendment back to the Independent Electricity System Operator (IESO) for further consideration when the OEB's review determines that an amendment to the market rule is not in the best interest of ratepayers, having regard to</i>	<u>2017 Annual Report – Response:</u> The Ontario Energy Board (OEB) agrees with the importance that the Auditor General attaches to outcomes that are in the best interests of ratepayers. The OEB supports the recommendations of its OEB Panel, and will continue to use the tools at its disposal to signal that support while respecting its own mandate and processes and the authority and responsibilities of other agencies. Since 2011, the OEB has regularly corresponded with the IESO regarding the recommendations the OEB Panel makes in its reports. When the OEB renewed the IESO's licence in 2013, a new licence condition was included that requires the IESO to make annual filings to the OEB on the status of actions taken further to recommendations in OEB Panel reports, including the rationale for not taking action where a recommendation remains outstanding. The OEB will continue to work with the IESO to ensure that high-priority recommendations made by the OEB Panel are appropriately	As and when market rule amendments are made by the Independent Electricity System Operator (IESO) and filed with the Ontario Energy Board (OEB), the OEB will continue to exercise its existing authority in an independent manner and with due regard to the criteria for assessing market rule amendments as set out in the Electricity Act, 1998. Steps are being taken to further engage the IESO in respect of outstanding Market Surveillance Panel (MSP) recommendations on a timely basis. To the extent that the MSP questions the sufficiency or clarity of the IESO's response to an MSP recommendation, whether in correspondence with the OEB following release of an MSP report or in the IESO's annual filing, the MSP will follow up with the IESO rather than commenting on the response only in the next available semi-annual monitoring report as is currently the practice.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
<i>the fact that it does not address the Market Surveillance Panel's recommendations. The OEB should continue to revoke and refer such a market rule amendment back to the IESO until it is satisfied that the market rule amendment is in the best interest of ratepayers.</i>	addressed in a timely manner. <u>Status Update:</u> See Outstanding Undertakings for additional information	The OEB will undertake additional follow-up as appropriate in the event that substantial outstanding issues remain after the initial outreach by the MSP.
AG Recommendation #3 <i>To ensure that ratepayers' interests are protected and that recommendations made by the Ontario Energy Board Market Surveillance Panel (OEB Panel) to improve market rules are addressed, we recommend that the Ministry of Energy review the legislative power and authority of the Ontario Energy Board to conduct a review of a market rule on its own motion, and to consider expanding its authority under the Electricity Act, 1998, when misuse and abuse of a market rule is brought forward by the OEB Panel and is not effectively being addressed by the Independent Electricity System Operator (IESO).</i>	<u>2017 Annual Report – Response:</u> The Ministry of Energy supports the Ontario Energy Board (OEB) and the IESO in the important roles they play to ensure that Ontario's electricity market operates efficiently. The Ministry, in consultation with both the OEB and the IESO, will review the Electricity Act, 1998, regarding the market rule approval process. The Ministry will also review the authority of the OEB. <u>Status Update:</u> See Outstanding Undertakings for additional information	The Ministry of Energy is committed to strong electricity market oversight in Ontario and is working closely with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB) in reviewing the appropriate role and legislative authority of the OEB with regards to the review and amendment of market rules. This review is expected to be completed this year.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
AG Recommendation #4 <i>To ensure the transparency of government decisions, we recommend that the Ministry of Energy review the impact of the Industrial Conservation Initiative on low-energy consuming ratepayers and publicly report this information.</i>	<u>2017 Annual Report – Response:</u> The Ministry continues to monitor the impact of the Industrial Conservation Initiative (ICI) on the electricity system in reducing peak demand and the impact on all classes of electricity consumers. The recovery mechanism under ICI maintains the relationship between a consumer's electricity costs and their contribution to provincial peak demand. Lowered peak demand reduces the need for supply resources and ultimately the projection for electricity system cost. The Independent Electricity System Operator (IESO) estimates that ICI reduced peak demand by about 1,300 megawatts in 2016. ICI supports a fair cost allocation framework where consumers who are contributing the least to peak demand pay a smaller portion of these related long-run costs. It is also worth noting that the IESO publishes on its website the allocation of global- adjustment costs each month, as well as the consumption for each class of consumer. The Ministry would also like to clarify that the benefit for residential and small-business consumers will not be influenced by ICI expansion. The Ontario Fair Hydro Plan reduced electricity bills for residential consumers by an average of 25% and will hold any increases to the rate of inflation for four years. <u>Status Update:</u> See Outstanding Undertakings for additional information	The Industrial Conservation Initiative (ICI) program has been successful at reducing peak electricity demand, which benefits the system by reducing the need for peaking generation. This puts downward pressure on electricity system costs as we move forward, helping to ensure a more cost-effective system for all ratepayers. The Ministry of Energy continues to monitor and report on the impact of the ICI program on the electricity system, including reductions in peak demand and impacts on all classes of electricity consumers. The results of the ICI program can be seen in monthly Independent Electricity System Operator (IESO) reports and the quarterly Ontario Energy Report.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
AG Recommendation #5 <i>To protect ratepayers' interests and to improve the transparency of the decisions of the Independent Electricity System Operator (IESO), we recommend that the IESO provide a detailed analysis to the Ontario Energy Board Market Surveillance Panel (OEB Panel) to support its assertion that the Standby Cost Recovery Program is necessary to ensure a reliable supply of electricity for Ontarians.</i>	<u>2017 Annual Report – Response:</u> In 2018, the IESO will present to the OEB Panel a detailed analysis supporting the rationale for its previous assertions to the OEB Panel that a real-time generator commitment mechanism (currently the Real-Time Generator Cost Guarantee Program, referred to in this report as the Standby Cost Recovery Program) is necessary to allow the IESO to comply with North American power system reliability standards and ensure a reliable supply of electricity for Ontarians. <u>Status Update:</u> The Independent Electricity System Operator (IESO) is scheduled to meet with the Ontario Energy Board's Market Surveillance Place (MSP) on April 5, 2018 to present a detailed analysis supporting the rationale for maintaining a real-time generator commitment mechanism.	The Independent Electricity System Operator (IESO) is making fundamental changes to the electricity market, through the Market Renewal Program, that will include replacing the current real-time generator commitment mechanisms with a more efficient and transparent form of unit commitment. Until fundamental changes can be made, the current program is necessary to maintain the reliability of our electricity system and comply with mandatory continent-wide power system reliability standards.
AG Recommendation #6 <i>To ensure that ratepayers are not charged for unnecessary costs, we recommend that, if the Independent Electricity System Operator does not cancel the Standby Cost Recovery Program, it fully implement the Ontario Energy Board Market Surveillance Panel's (OEB Panel) recommendations</i>	<u>2017 Annual Report – Response:</u> The IESO acknowledges the recommendation made by the Auditor General and notes that the total costs of the Real-Time Generator Cost Guarantee Program (referred to in this report as the Standby Cost Recovery Program) have fallen from \$61 million in 2014 to \$23 million in 2016. In light of OEB Panel recommendations, the IESO implemented a new cost recovery framework for this Program on August 1, 2017. Under this new framework, the values for 14 of 15 eligible costs are now set and approved in advance of participating in the Program for each program participant. This change introduced transparency and removed the potential for overpayments and the	The Independent Electricity System Operator (IESO) is making fundamental changes to the electricity market, through the Market Renewal Program, that will include replacing the current real-time generator commitment mechanisms with a more efficient and transparent form of unit commitment.

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
<i>and not reimburse generators for operating and maintenance costs under the Program.</i>	need for after-the-fact audits for these components. One cost component is still subject to audit, as it cannot be pre-approved, but this cost component was not identified as an issue in the Standby Cost Recovery Program audits. The IESO acknowledges issues with the current Standby Cost Recovery Program in our responses to previous OEB Panel reports and has committed to replace it. The IESO has initiated a \$200-million comprehensive program to fundamentally overhaul Ontario's electricity market. Market Renewal is estimated to result in up to \$5.2 billion in savings, the majority of which is estimated to be realized by ratepayers (see "The Future of Ontario's Electricity Market, A Benefits Case Assessment of the Market Renewal Project," http://www.ieso.ca/-/media/files/ieso/document-library/engage/me/benefits-case-assessment-market-renewal-project-clean-20170420.pdf?la=en and http://www.ieso.ca/sector-participants). The Enhanced Real-Time Unit Commitment initiative of Market Renewal will replace the current Standby Cost Recovery Program with a transparent and competitive mechanism that will ensure reliability through a more efficient commitment of resources near real time. <u>Status Update:</u> In light of Ontario Energy Board's Market Surveillance Panel (MSP) recommendations, the Independent Electricity System Operator (IESO) implemented a new cost recovery framework for this Program on August 1, 2017. Under this framework, eligible costs are set and approved in advance of participating in the Program for each program participant. Program costs have fallen from \$61 million in 2014 to \$22	

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
	million in 2017.	
AG Recommendation #7 <i>To ensure that ratepayers are not charged for unnecessary costs associated with the Lost Profit Recovery Program, we recommend that the Independent Electricity System Operator (IESO) implement the recommendations of the Ontario Energy Board Market Surveillance Panel (OEB Panel) regarding this Program.</i>	<u>2017 Annual Report – Response:</u> The IESO acknowledges the recommendation made by the Auditor General and carefully considers every OEB Panel recommendation and the OEB Panel's underpinning analysis, and responds to each recommendation outlining the actions it will take in a letter directed to the Chair and CEO of the OEB. The IESO has acted on a number of the recommendations made by the OEB Panel related to Congestion Management Settlement Credits (referred to in this report as the Lost Profit Recovery Program) and has implemented more than a dozen market rule amendments regarding the Program. In light of the recommendations made by the OEB Panel over the years, the IESO will continue to consider the OEB Panel recommendations when assessing amendments to market rules while also balancing the need to ensure the reliability of the electricity network, to consider the impact upon market design including potential unintended adverse effects and to assess the ability of the IESO and market participants to implement the change. The IESO has initiated a \$200-million comprehensive program to fundamentally overhaul Ontario's electricity market. Market Renewal is estimated to result in up to \$5.2 billion in savings, the majority of which is estimated to be realized by ratepayers (see "The Future of Ontario's Electricity Market, A Benefits Case Assessment of the Market Renewal Project," http://www.ieso.ca/-/media/files/ieso/document-library/engage/me/benefits-case-assessment-market-renewal-project-clean-20170420.pdf?la=en and http://www.ieso.ca/sector-participants). The Single Schedule Market	The Independent Electricity System Operator (IESO) has introduced fundamental changes through the Market Renewal Program that would eliminate the need for CMSC through the Single Schedule Market (SSM). The IESO has initiated a \$200 million comprehensive program to fundamentally overhaul Ontario's electricity market. Market Renewal is estimated to result in up to \$5.2 billion in savings, the majority of which is estimated to be realized by ratepayers (see "The Future of Ontario's Electricity Market, A Benefits Case Assessment of the Market Renewal Project," http://www.ieso.ca/-/media/files/ieso/document-library/engage/me/benefitscase-assessment-market-renewal-projectclean-20170420.pdf?la=en and http://www.ieso.ca/sector-participants). The Single Schedule Market (SSM) initiative of Market Renewal will eliminate the Lost Profit Recovery Program.

Summary Status Table in Response to the Report of the Auditor General of Ontario

Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
	(SSM) initiative of Market Renewal will eliminate the Lost Profit Recovery Program. <u>Status Update:</u> The Independent Electricity System Operator (IESO) has acted on a number of the recommendations made by the Ontario Energy Board's Market Surveillance Panel (MSP) related to Congestion Management Settlement Credits (referred to in this report as the Lost Profit Recovery Program) and has implemented more than a dozen market rule amendments regarding the Program. A December 2016 MSP report noted: "many of the most problematic issues associated with the CMSC regime have been brought to an end – in large measure as a result of the Panel having identified these situations, and the IESO having acted to eliminate them."	
AG Recommendation #8 <i>To ensure that the Market Renewal Initiative (Initiative) considers and protects all ratepayers' interests, we recommend that the Independent Electricity System Operator (IESO):</i> <i>immediately prohibit representatives from companies that have been found by the Ontario Energy Board Market Surveillance Panel or the IESO</i>	<u>2017 Annual Report – Response:</u> The IESO acknowledges the recommendations of the Auditor General and will continue to evaluate the membership of the working groups used for Market Renewal. The IESO will also continue to ensure that its stakeholder engagement processes, including Market Renewal, seek representation from low-volume consumers where appropriate. The IESO's stakeholder engagement processes seek the input from a wide representation of participants—generators, traders, consumers, stakeholders, First Nations and Metis Peoples, communities, and the general public—and are guided by seven engagement principles that were put in place in November 2015 (see http://www.ieso.ca/sector-participants/engagement-initiatives/overview/engagement-	The Independent Electricity System Operator (IESO) will complete a general review of its engagement strategy. The IESO expects to communicate and implement updates to its engagement strategy by Q3 2018. The engagement strategy will continue to be aligned with the IESO engagement principles and ensure wide representation from our market participants, sector stakeholders and other stakeholders such as low volume consumers.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
<i>Oversight Division to have misused IESO programs from participating in the Initiative working group;</i> <i>establish a minimum number of working group members representing low-power consumers and ensure that those positions are always filled; and</i> <i>publicly report in clear language how the results of the Initiative will be in the best interests of all ratepayers.</i>	principles). One of the principles, which applies to Market Renewal, seeks to ensure adequate representation in each engagement of the public or those that have a tendency to remain silent or reluctant to engage. Where practical, a variety of engagement methods will be offered to provide flexibility to participate. The IESO is also required by statute (the Electricity Act, 1998, S.O. 1998, c. 15, Sched. A, s. 188) to have a Stakeholder Advisory Committee that provides appointed stakeholder representatives with the opportunity to present advice and recommendations on key initiatives like Market Renewal directly to the IESO's independent Board of Directors and Leadership Team. Members include low-volume consumers (see http://www.ieso.ca/-/media/files/ieso/document-library/sac/sac_tor.pdf). <u>Status Update:</u> In December 2017, a member representing low volume consumers was added to the Market Renewal Working Group (MRWG). The Independent Electricity System Operator (IESO) will continue to ensure that its stakeholder engagement processes, including Market Renewal, seeks broad, all-inclusive representation.	
AG Recommendation #9	<u>2017 Annual Report – Response:</u>	The Market Assessment and Compliance Division (MACD) will complete a risk and resourcing assessment in the first

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
<i>To ensure that the Independent Electricity System Operator (IESO) Market Assessment and Compliance Division can conduct proper oversight of the market, we recommend that the IESO:</i> <i>• assess the resources needed to eliminate its investigation backlog and conduct the large-scale investigations that have proven effective in recovering funds and identifying and sanctioning significant rule violations; and</i> <i>• attract and retain staff with experience in market rules and expertise in investigation.</i>	The IESO agrees with the Auditor General's recommendation, as it is consistent with recent increases in staff at the Oversight Division and the process of ongoing review of priorities. As part of the IESO Business Planning process for 2018, the IESO is evaluating the risk profile of a variety of its priorities, including the enforcement of market rules. As part of this exercise, consideration is being undertaken to both increase the total level of resources made available for enforcement, as well as the conversion of some current resources to full-time and non-temporary staff. In doing so, attracting staff with expertise in market rules and investigations will be a priority. <u>Status Update:</u> See Outstanding Undertakings for additional information	quarter of 2018 to identify opportunities to convert contracted staff to regular (i.e., full-time and non-temporary) status and increase the total level of resources to the enforcement and oversight functions.
AG Recommendation #10 <i>To enable the Independent Electricity System Operator Market Assessment and Compliance Division (Oversight Division) to conduct thorough and effective investigations, we recommend that the Ministry of Energy give the Oversight Division explicit legislative</i>	<u>2017 Annual Report – Response:</u> The Ministry supports the vital roles that the Oversight Division plays in investigating potential infractions in Ontario's electricity system. To ensure that the Oversight Division can effectively conduct its investigations, the Ministry will consult with Independent Electricity System Operator regarding the potential need for additional legislative authority to assist the Oversight Division in performing its mandated duties.	The Ministry of Energy is committed to strong electricity market oversight in Ontario, and is working closely with the Independent Electricity System Operator (IESO) in reviewing the appropriate role and legislative authority of Market Assessment and Compliance Division (MACD) regarding oversight of Ontario's electricity market, in order to ensure effective and efficient investigations into instances of potential abuse of the market rules.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
<i>authority under the Electricity Act to compel information and evidence in the course of its investigations.</i>	<u>Status Update:</u> See Outstanding Undertakings for additional information	
AG Recommendation #11 <i>To ensure that the Independent Electricity System Operator (IESO) Market Assessment and Compliance Division (Oversight Division) can conduct proper oversight of the market, we recommend that the IESO replace the Oversight Division's computer system as soon as possible.</i>	<u>2017 Annual Report – Response:</u> As part of the IESO Business Planning process for 2018, the IESO is evaluating the risk profile of a variety of its priorities, including the sufficiency of resources directed towards the Oversight Division's IT support and replacement of the computer system. <u>Status Update:</u> Substantial technical support has been provided to the Market Assessment and Oversight Division (MACD) to enable the development of technical business requirements geared towards an enforcement support tool. The MACD is now using a proposed tool on a pilot basis for case management and using industry-standard litigation and evidence management tools to support its current cases.	Market Assessment and Compliance Division (MACD) expects to complete its internal assessment, including user acceptance testing and full implementation of the proposed enforcement support tool by Q2 2018.
AG Recommendation #12 <i>To strengthen the independence of the Independent Electricity System Operator (IESO) Market Assessment and Compliance Division (Oversight Division), we recommend that the IESO change the Oversight Division's</i>	<u>2017 Annual Report – Response:</u> The IESO agrees with the Auditor General's recommendation. The IESO's independent Board of Directors approved in October 2017 a new reporting structure whereby the Director of the Oversight Division will report directly to the IESO Board of Directors and report only administratively to the IESO CEO. <u>Status Update:</u>	The Independent Electricity System Operator (IESO) has completed all actions to address the recommendation.

**Summary Status Table in Response to the
Report of the Auditor General of Ontario**

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
<i>reporting structure.</i>	Prior to the release of the Auditor's report, the Independent Electricity System Operator (IESO) completed implementing a new reporting structure whereby the Director of the Oversight Division reports directly to the IESO Board of Directors and reports only administratively to the IESO CEO.	
AG Recommendation #13 <i>To strengthen its cybersecurity governance, we recommend that the Independent Electricity System Operator (IESO) create a senior-level position for cybersecurity and establish a formal reporting process to both IESO executives and the IESO Board of Directors.</i>	<u>2017 Annual Report – Response:</u> The IESO agrees with the Auditor General's recommendation. The IESO is already in the process of recruiting a new Chief Information Officer (CIO) with an increased focus on cybersecurity, and will consider creating a senior-level position for cybersecurity with formal reporting to both IESO executives and the IESO independent Board of Directors. <u>Status Update:</u> Prior to the release of the Auditor's report, the Independent Electricity System Operator (IESO) had initiated a recruitment process for a Chief Information Officer (CIO), with an increased focus on cybersecurity. Based on the senior-level nature of the role, the successful candidate in the CIO position will be an experienced senior technology executive, who has a deep understanding of Critical Infrastructure Protection environments, like the IESO, and demonstrated experience in overseeing enterprise-wide cybersecurity management programs. The CIO will have cross-organizational influence to ensure that cybersecurity risk management is being addressed and integrated across all business units of the organization.	Target date for appointment of Chief Information Officer (CIO) is by end of Q1 2018. The Independent Electricity System Operator (IESO) is also looking to establish a senior-level position for cybersecurity, reporting to the CIO, who will be responsible for the delivery and operations of the IESO's cybersecurity program. The timing of the senior-level cybersecurity role is targeting Q1 2018.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
	The CIO will report to the IESO's Chief Executive Officer. This was an internal governance decision, made by the IESO's executive in collaboration with the board.	
AG Recommendation #14 <i>To ensure there are sufficient cybersecurity resources in place to respond to cyberattacks, we recommend that the Independent Electricity System Operator (IESO) increase the number of cybersecurity staff to the recommended level of seven and/or engage an external IT cybersecurity vendor to be on standby.</i>	<u>2017 Annual Report – Response:</u> The IESO complies with all applicable North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection standards, which include standards for cybersecurity. The IESO is in the process of implementing an independent consultant's recommendation to increase the number of current cybersecurity staff in a manner consistent with the Auditor General's recommendation. The IESO has also retained the services of a cybersecurity vendor to augment the existing staff in the event of a cybersecurity event. The IESO is also an active member of the North American Cybersecurity Mutual Assistance Program (CMA), which provides access to cybersecurity specialists from over 150 North American utilities in the event of a cyberincident. <u>Status Update:</u> Prior to the release of the Auditor's report, the Independent Electricity System Operator (IESO) had started implementing an independent consultant's recommendation to increase the number of current cybersecurity staff, which is consistent with the Auditor General's recommendation. The IESO has retained the services of a cybersecurity vendor to augment the existing staff in the event of a major cybersecurity event.	The Independent Electricity System Operator (IESO) has also launched a competitive process to retain a cybersecurity third-party vendor that will, in conjunction with IESO staff, provide a robust security operations center (SOC) enabling 24/7/365 real-time cybersecurity monitoring.

Summary Status Table in Response to the Report of the Auditor General of Ontario

Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
AG Recommendation #15 <i>To reduce cybersecurity risk and to prevent potential costly IT project redesigns, we recommend that the IT department of the Independent Electricity System Operator (IESO) involve its cybersecurity staff in the early stages of all IT projects that could pose cybersecurity risks.</i>	<u>2017 Annual Report – Response:</u> The IESO complies with all applicable North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection standards, which include standards for cybersecurity. It is the IESO's current practice that security risk assessments are incorporated in the IT project management practices. Having said that, the IESO will continue to enhance its approach to ensure "cybersecurity by design" in all of its IT-related projects. That means ensuring that the cybersecurity requirements are being considered early in the process of any new IT program design and that sufficient cybersecurity staff are allocated at this important part of any project. This will be further facilitated by the formation of the IESO's new Program Management Office, which will ensure an enterprise-holistic view on all IESO projects. <u>Status Update:</u> The Independent Electricity System Operator's (IESO) new Project Management Office was formed in Q4 2017.	The incoming Chief Information Officer (CIO) and senior-level cybersecurity resource (as referenced in the Independent Electricity System Operator (IESO) responses to recommendation #13) will establish effective governance ensuring that security practices are being built-in to the IESO's project management program and individual IT project lifecycles. The IESO will also be developing a best practice guide for the sector on cybersecurity risks in the supply chain. This would be applicable to the vendor supply chain that delivers industrial control system hardware, software, and computing and networking services associated with not only the bulk system operations, but traditional enterprise environments. The best practice guide is expected to be in place by the end of 2018.
AG Recommendation #16 <i>To reduce the cybersecurity risk of the Independent Electricity System Operator (IESO), we recommend that the IESO procure technology that prevents and identifies breaches of confidential information and monitors</i>	<u>2017 Annual Report – Response:</u> The IESO agrees with the Auditor General's recommendation. The IESO complies with all applicable North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection standards, which include standards for cybersecurity. The IESO has procured technology that prevents and identifies breaches of confidential information and monitors staff access to confidential information in real time through the Advanced Malware project, and is	The Independent Electricity System Operator (IESO) is currently making minor refinements to the Advanced Malware system, and project closure is planned for the end of Q1 2018.

Summary Status Table in Response to the Report of the Auditor General of Ontario

Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
<i>staff access to confidential information in real time.</i>	implementing that technology now, with a target completion date of the end of the fourth quarter of the 2017 fiscal year. <u>Status Update:</u> The Independent Electricity System Operator (IESO) has procured robust detection technology that has the ability to not only identify unusual activity that could lead to breaches of confidential information, but also malicious activity that could compromise the integrity of the IESO IT environments. Through the delivery of the Advanced Malware project, the detection technology is now in place, and in addition, all objectives identified in the business case for the project were met in 2017.	
AG Recommendation #17 <i>To reduce the cybersecurity risk of the Independent Electricity System Operator (IESO), we recommend that:</i> • <i>the IESO establish an external vendor cybersecurity policy; and</i> • <i>the cybersecurity team conduct a regular assessment of the security risk that external vendors pose to the IESO.</i>	<u>2017 Annual Report – Response:</u> The IESO complies with all applicable North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection standards, which include standards for cybersecurity. The cybersecurity team works directly with the procurement and legal processes to ensure security requirements are met. The IESO was an active participant in the development of the NERC Supply Chain risk standards, and is in the process of developing and implementing supply chain risk management measures to comply with these standards, which will also include processes that are responsive to the recommendation. <u>Status Update:</u> On an ongoing basis, the Independent Electricity System Operator's	The Independent Electricity System Operator (IESO) is in the process of developing and implementing supply chain risk management measures that comply with North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection Supply Chain risk standards, which will also include processes that are responsive to the recommendation. The IESO is expanding its cybersecurity governance framework over the next two to three years to meet the National Institute of Standards and Technology (NIST) Cybersecurity framework that will help assess and mitigate vendor risks to the supply chain. This framework will establish effective security governance around external vendors. The plan associated with this will be developed by the end of 2018.

Summary Status Table in Response to the Report of the Auditor General of Ontario

*Chapter 3 2017 Annual Report of the Auditor General – IESO – Market Oversight and Cybersecurity
Ministry of Energy, IESO, OEB*

Auditor's Recommendation	Completed Undertaking	Outstanding Undertaking (including Timeline)
	(IESO) cybersecurity team works directly with the procurement and legal processes to ensure security requirements are met.	As identified, the IESO will also be developing a best practice guide for the sector on cybersecurity risks in the supply chain; the guide is expected to be in place by the end of 2018.
AG Recommendation #18 <i>To ensure that backup tapes are adequately protected and available when needed, we recommend that the Independent Electricity System Operator (IESO):</i> • <i>properly encrypt all backup tapes; and</i> • <i>store them in a secure off-site location.</i>	<u>2017 Annual Report – Response:</u> The IESO complies with all applicable North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection standards, which include standards for cybersecurity. Access to backup tapes is tightly controlled both in on-site and off-site storage. The IESO will investigate the feasibility of storing all backup tapes off-site and of further protecting backup tapes with encryption. The IESO does not rely on backup tapes as a primary recovery mechanism as all of our critical systems are high availability and site redundant through our Backup Data Centre. <u>Status Update:</u> The Independent Electricity System Operator (IESO) has eliminated the use of tape-based backups in favour of system and data redundancy across two highly available and redundant data centers.	The Independent Electricity System Operator (IESO) will continue investigating the feasibility of storing all legacy backup tapes off-site and to further protection of legacy backup tapes with encryption.